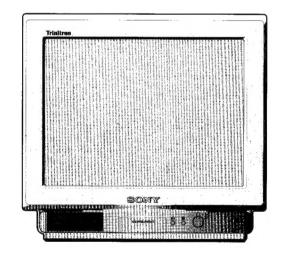
SERVICE MANUAL

BE-4A CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.	MODEL	COMMANDER	DEST	CHASSIS NO.
KV-M2170A	RM-836	Italian	SCC-J05B-A	KV-M2170K	RM-836	OIRT	SÇC-J03B-A
KV-M2171A	RM-836	Italian	SCC-J05A-A	KV-M2171K	RM-836	OIRT	SCC-J03A-A
KV-M2170B	RM-836	French	SCC-J06A-A	KV-M2171KF	RM-836	Russian	SCC-J03C-A
KV-M2171B	RM-836	French	SCC-J06B-A	KV-M2170L	RM-836	lrish	SCC-J02B-A
KV-M2170D	RM-836	AEP	SCC-J08A-A	KV-M2171L	RM-836	Irish	SCC-J02A-A
KV-M2171D	PM-836	AEP	SCC-J08B-A	KV-M2170U	RM-836	UK	SCC-J01B-A
KV-M2170E	RM-836	Spanish	SCC-J04B-A	KV-M2171U	RM-836	UK	SCC-J01A-A
KV-M2171E	RM-836	Spanish	SCC-J04A-A			=.	







ITEM MODEL	Television System	Channel Coverage	Colour System
Italian	B/G/H	VHF: E2-E12, S1-S20 UHF: E21-E69	PAL
French	B/G/H, L	VHF: E2-E12, S1-S20, S21-S41, F2-F10, B-Q UHF: E21-E69, F21-F69	PAL, SECAM
AEP	B/G/H	VHF: E2-E12, S1-S20, S21-S41 UHF: E21-E69	PAL, SECAM
Spanish	B/G/H	VHF: E2-E12, S1-S20, S21-S41 UHF: E21-E69	PAL
OIRT Russian	B/G, D/K	B/G VHF: E2-E12 UHF: E21-E69 Hyper: S1-S41 (KV-M2170K/M2171K) Super: S1-S20 (KV-M2171KR) D/K VHF: R01-R12 UHF: R21-R69	PAL, SECAM NTSC3.58/4.43 (video input only)
Irish UK	1	VHF: A-J (KV-M2170L/M2171L) UHF: 21-69 Huper: S1-S41 (KV-M2170L/M2171L)	PAL

MODEL	Italian	French	AEP	Spanish	OIRT Russian	Irish UK
Power Consumption	58W	58Wh	58W	58W	58W	75W

SPECIFICATIONS

Picture Tube

Hi-Black Trinitron

Approx. 55 cm (21 inches)

(Approx. 51 cm picture measured

diagonally) 100° -deflection

Input/Output Terminals

[INPUTS]

21-pin connector (CENELEC standard)

- audio / video input

RGB input

[OUTPUTS]

Ω Headphone jack: minijack

Sound output

4W (RMS)

5W (music power)

Dimensions Weight 513x475x475 mm approx. Approx. 21.0kg

Supplied accessories

RM-836 Remote Commander (1)

IEC designated batteries (2)

Other features

TELETEXT (KV-M2171A/M2171B/M2171D/M2171E/M2171K/M2171KR/M2171L/M2171U)

[RM-836]

Remote control system

infrared control

Power requirements

3V dc (2 batteries) R6 (size AA) Approx. 210x45x24 mm (w/h/d)

Dimensions Weight

Approx. 90g (Not including batteries)

Design and specifications are subject to change without notice.

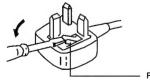
Model name	KV-M2170A KV-M2171A	KV-M2170B `KV-M2171B	KV-M2170D KV-M2171D	KV-M2170E KV-M2171E	KV-M2170K KV-M2171K KV-M2171KR	KV-M2170L KV-M2171L KV-M2170U KV-M2171U
Pal Comb	OFF	OFF	OFF	OFF	OFF	OFF
PIP	OFF	OFF	OFF	OFF	OFF	OFF
RGB Priority	ON	ON	ON	ON	ON	ON
Woofer Box	OFF	OFF	OFF	OFF	OFF	OFF
Scart 1,	ON	ON	ON	ON	ON	ON
Scart 2	OFF	OFF	OFF	OFF	OFF	OFF
Front in (3)	OFF	OFF	OFF	OFF	OFF	OFF
Scart 4	OFF	OFF	OFF	OFF	OFF	OFF
Projector	OFF	OFF	OFF	OFF	OFF	OFF
AKB in 16:9 mode	OFF	OFF	OFF	OFF	OFF	OFF
Norm B/G/H	ON	ON	ON	ON	ON	OFF
Norm i	OFF	OFF	OFF	OFF	OFF	ON
Norm D/K	OFF	OFF	OFF	OFF	ON	OFF
Norm AUS	OFF	OFF	OFF	OFF	OFF	OFF
Norm L	OFF	ON	OFF	OFF	OFF	OFF
Norm SAT	OFF	OFF	OFF	OFF	OFF	OFF
Norm M	OFF	OFF	OFF	OFF	OFF	OFF
Language Preset	Italian	French	German	Spanish	OIRT	English

WARNING (KV-M2170L/M2171L/M2170U/M2171U only)

The flexible mains lead is supplied connected to a **B.S.** 1363 fused plug having a fuse of 5 **AMP** capacity. Should the fuse need to be replaced, use a 5 **AMP FUSE** approved by **ASTA** to **BS 1362**, ie one that carries the mark.

IF THE PLUG SUPPLIED WITH THIS APPLIANCE IS NOT SUITABLE FOR YOUR SOCKET OUTLETS IN YOUR HOME. IT SHOULD BE CUT OFF AND AN APPROPRIATE PLUG FITTED. THE PLUG SEVERED FROM THE MAINS LEAD MUST BE DESTROYED AS A PLUG WITH BARED WIRES IS DANGEROUS IF ENGAGED IN A LIVE SOCKET OUTLET.

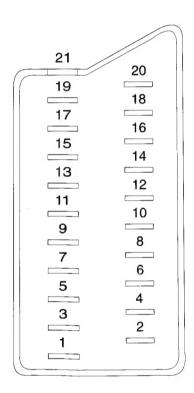
When an alternative type of plug is used it should be fitted with a 5 AMP FUSE, otherwise the circuit should be protected by a 5 AMP FUSE at the distribution board.



How to replace the fuse. Open the fuse compartment with the screwdriver blade and replace the fuse.

FLISE

21 pin connector (Ö-1)



		Piggel	Signal level	
Pin No		Signal	Signal level	
1	0	Audio output B (right)	Standard level: 0.5Vrms Output impedance:less than 1kohm*	
2	0	Audio input B (right)	Standard level:0.5Vrms Input impedance:More than 10kohms*	
3	0	Audio output A (left)	Standard level:0.5Vrms Output impedance:less than 1kohm*	
4	0	Ground (audio)		
5	0	Ground (blue)		
6	0	Audio input A (left)	Standard level:0.5Vrms Input impedance:More than 10kohms*	
7	0	Blue input	0.7V±3dB, 75ohms, positive	
8	0	Function select (AV control)	High state (9.5—12V):Part mode Low state (0—2V):TV mode Input impedance:More than 10kohms Input capacitance:Less than 2nF	
9	0	Ground (green)		
10	0	Open		"
11	0	Green	Green signal:0.7V±3dB. 75ohms, positive	
12	0	Open		
13	0	Ground(red)		
14	•	Ground (blanking)		
15	0	Red input	0.7V±3dB, 75ohms, positive	
		(S signal) croma input	0.3V±3dB, 75ohms, positive	
16	0	Blanking input (Ys signal)	High state (1—3V) Low state (0—0.4V) Input impedance:75ohms	
17	0	Ground (video output)		
18	0	Ground (video input)		
19	0 ,	Video output	1V±3dB, 75ohms, positive Sync:0.3V(-3, +10dB)	
20	0	Video input	1V±3dB, 75ohms, positive Sync:0.3V(-3, +10dB)	
	_	Video Input/Y (S signal)	1V±3dB, 75ohms, positive Sync:0.3V(-3, +10dB)	. ,
21	0	Common ground (plug, shield)	· .	

[○] Connected ● Not Connected (open) * at 20Hz - 20kHz

TABLE OF CONTENTS

Sec	<u>ction</u>	<u>Title</u>	<u>Page</u>	<u>Sec</u>	tion	<u>Title</u>	<u>Page</u>
1,	TV Operations Adjusting the picture Menu Operation Advanced Presetting Teletext Operation Optional Connection	e and sound	8 9 10 11 12		5-1. 5-2. 5-3.	Block Diagram	29 29 33 39
2.	2-2. Service Position	novalmoval	14		6-1.	CHODED VIEWS Chassis and Picture Tube CTRICAL PARTS LIST	
3.	3-2. Convergence 3-3. Screen (G2), Dr Sub Colour and	ive, White Balance, Sub Brightness	17				
4.	4-2. Test Mode 2 :	IMENTS streets gnostic Software	21				

CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT. AFTER REMOVING THE ANODE.

WARNING!!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.

THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING!!
COMPONENTS IDENTIFIED BY SHADING AND MARK A ON THE
SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND, IN THE PARTS
LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE
COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS
APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS
PUBLISHED BY SONY.

ATTENTION

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CAT HODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

ATTENTION !!

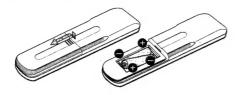
AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÁSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE. LE CHÁSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ À L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIES PAR UNE TRAME ET PAR UNE MARQUE A SUR LES VUES EXPLOSÉES ET LES LESTES DE PIECES SONT D'UNE IMPORTANCE CRITIQUE PUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÉCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY.

Step 1

Inserting the Batteries into the Remote Commander



Step 2

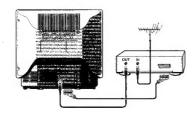
Connecting the Aerial

If you connect a VCR, skip to step 3.

Connect an external aerial to the socket \mathbf{X} .

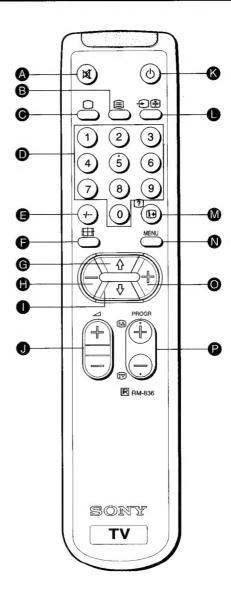
Step 3

Connecting a VCR



- It is recommended to tune in the VCR signal to programme number "()". For details, see "Presetting Channels Manually" on page 12.

The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.



6

Step 4

Presetting Channels Automatically

TV searches for all available channels. If manual tuning is preferred see Menu option -Presetting Channels Manually.

Plug into mains.

Press power switch ① W on TV set.

Press and hold on TV set for 2 seconds. Auto tuning starts and screen shows.



Notes • When Auto tuning stops the programme on position 1 is seen.

 KV-M2171U/M2171L only – channels are automatically stored as follows:

KV-M2	171U	KV-M2171L
Programme 1	BBC1	RTE1
Programme 2	BBC2	RTE2
Programme 3		BBC1
Programme 4	CH4 or S4C	BBC2
Programme 5	_	ITV
Programme 6	-	CH4 or S4C

TV Operation

TV Operation

This section explains functions used whilst watching TV. Most operations are carried out using the Remote Commander.

То	Press
Switch on	⊕ W on TV
Switch off temporarily	ტ (S TV is now in standby mode, ტ indicator V on TV lights.
Switch on again	O, PROGR +/- P U or any number button D
Switch off completely	
Select programmes	PROGR +/- D U or number buttons D For double digit numbers press -/ G then the number e.g. For 23, press -/ G then 2 and 3.
Display the programme number	
Adjust the volume	△ +/- 0 T
Mute the sound	 ⋘
View video input	⊕ OR Press again to return to TV programme.
View programmes in 16:9 mode	### f Press again to return to 4:3 mode.

- **1** Select the channel which carries the teletext service you wish to receive.
- 2 Press

 B to switch on teletext.
- 3 Input three digits for the page number using the programme number buttons **①** or PROGR +/- **② U**.
- **4** Press **6** to switch off teletext.

Note • Teletext errors may occur if the broadcasting signals are weak.

Using Other Teletext Functions

Superimposing teletext on the TV

Press $\ensuremath{\circledcirc}$ $\ensuremath{\image}$ once in teletext mode or twice in TV mode to superimpose teletext on the TV screen.



Freezing a teletext subpage

Press (HOLD) to freeze the subpage. Freezing the page prevents the information that is displayed from being updated. Press (Document) to cancel HOLD and allow update to continue.



Revealing concealed information (eg: answers to a quiz)

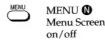
Press ? **(1)** to reveal information. Press again to conceal the information.

Using colour buttons to access pages

When the colour coded menu appears at the bottom of a page, press the colour button (red, green, blue or yellow) **GOO** to access the corresponding page.

Note • A programme status message in a blue box may appear when you change programmes (depends on broadcasters).

Use buttons on Remote Commander to control Menu screen.



Green **G** scroll up

Red **(1)** decrease



Yellow **(OK)** increase/confirm(OK)

Blue **1** scroll down

Adjusting the Picture

- 1 Press MENU .
- **2** Press green **6** or blue **1** button to select the item you wish to change.

Symbol	Item	- Effect	+
•	Picture	Less	More
3	Colour	Less	More
Ф	Brightness Sharpness	Darker Softer	Brighter Sharper

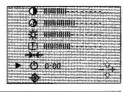
- **3** Press red **6** or yellow **0** button to change levels.
- **4** Press MENU **◊** to return to normal TV screen.

Note • To reset to factory preset picture levels, press green ⑤ or blue ⑥ button to select →•• and press yellow (OK) ⑥ button.

Using the Sleep Timer

The TV may be set to switch to the standby mode automatically after a length of time chosen by you. You may set the time in 30 minutes steps up to 4 hours.

- 1 Press MENU **(1)**.
- 2 Press green **G** or blue **1** button to select **(**).

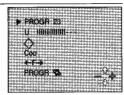


- $\begin{tabular}{ll} \bf 3 & Press\ red\ \textcircled{\bf 0} \ or\ yellow\ \textcircled{\bf 0} \ button\ to\ set\ time\ delay.\\ 0.00\ (OFF)\ 0.30\ \ 1.00\ \ 1.30\\ 4.00 \end{tabular}$
- **4** Press MENU **②** to return to normal TV screen. When watching TV, press **③ ③** to display time remaining.

Presetting Channels Manually

Up to 60 programme positions are available for presetting channels.

- 1 Press MENU **0**.
- **2** Press green **⑤** or blue **⑥** button to select ⇒ and press yellow (OK) **⑥** button.
- 3 Select programme number using PROGR +/- **?** or the number buttons **.**



- 4 Press green **6** or blue **1** button to select tuning bar (|||||||····) and press red **1** or yellow **0** button to start channel search. When a channel is found the tuning bar stops moving and you see the picture.
- 5 If you want to store, press green **⑤** or blue **⑥** button to select ⋄ and press yellow (OK) **⑥** button. If you do not want to store, press red **⑥** or yellow **⑥** button to continue search.
- **6** Repeat steps 3 to 5 for all other channels.
- **7** Press MENU **(a)** to return to normal TV screen.

Skipping Programme Positions

You can skip unused programme positions when selecting channels with the PROGR +/- **QU** buttons. You can still select them, however, using the number buttons **Q**.

- 1 Press MENU **0**.
- 2 Press green **⑤** or blue **⑥** button to select **ॐ** and press yellow **⑥** button.
- 3 Select programme number you want to skip using PROGR +/- □ button or number buttons □.



- **4** Press green **⑤** or blue **⑥** button to select Coo and press yellow (OK) **⑥** button.
- **5** Press green **⑤** or blue **⑥** button to select ♦ and press yellow (OK) **⑥** button to store.
- **6** Repeat steps 3 to 5 for other unused programme positions.
- **7** Press MENU **1** to return to normal TV screen.

Note • To restore a skipped programme number, refer to "Presetting Channels Manually".

Fine-Tuning Channels

You can fine tune a stored channel if necessary.

- 1 Select the channel you wish to fine tune.
- 2 Press MENU **(0**).
- **3** Press green **⑤** or blue **⑥** button to select **令** and press yellow (OK) **⑥** button.
- 4 Press green **⑤** or blue **⑥** button to select ←F → and use red **⑥** or yellow **⑥** button to adjust tuning.



- **5** Press green **⑤** or blue **⑥** button to select ◇ and press yellow (OK) **⑥** button to store.
- **6** Press MENU **1** to return to normal TV screen.

Exchanging Programme Positions

After tuning you may wish to rearrange the programme positions.

- 1 Press MENU **(1)**.
- 2 Press green **⑤** or blue **⑥** button to select **ॐ** and press yellow (OK) **⑥** button.
- Press green **6** or blue **1** button to select PROGR **3** and press yellow (OK) **0** button.

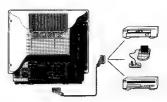


- 4 Press red **(1)** or yellow **(0)** button to select the first programme position.
- **5** Press the blue **0** button.
- **6** Press the red **1** or yellow **2** button to select the second programme position.
- 7 Press blue 1 button to select in and press yellow (OK) 1 button to exchange.
- **8** Repeat steps 4 to 7 for other programme positions.
- 9 Press MENU (1) to return to normal TV screen.

Optional Connections

Using the 21-pin Connector

Your TV has one 21-pin connector on the rear of the set. You can connect optional audio or video equipment to this connector, such as a VCR, video games or a video disc player.



1 Press • OR to view the video input signal.

2 Press • R or C to return to normal TV screen.

Connecting Headphones

Plug in the headphones to the Ω socket on the front of the TV set, then the sound from the speaker is muted.

15

Problem	Solution
No picture, screen is dark, no sound	 Plug the TV in. Press ⊕ W on the TV. Press ⊕ G or the programme number ⊕ on the remote commander if ⊕ indicator V is on. Check the aerial connection. Check that the video source is on. Turn the TV off for 3 or 4 seconds and then turn it on again using ⊕ W.
Poor or no picture (screen is dark, sound is good)	 Press MENU and adjust brightness picture and colour levels.
Good picture, no sound	 Adjust the volume ∠ +/- ● ■. Disconnect any headphones. Press ※ A if ※ is displayed on the screen.
No colour on colour programmes	 Press MENU (1) and adjust colour balance. Press MENU (1) and reset to factory settings.
Distorted picture when you change programmes or select teletext	 Turn off the equipment connected to the 21-pin connector Y.
Remote commander does not function	Replace the batteries.

[•] If you continue to have these problems, have your TV serviced by qualified personnel.

Specifications

TV system

Colour system

PAL

Channel coverage

KV-M2170L/M2171L UHF 21-69 VHF A-J Hyper S1-S41 KV-M2170U/M2171U UHF 21-69

Picture tube

HiBlack Trinitron Approx 54.5 cm (21 inches) (Approx 51 cm picture measured diagonally)

Inputs

21-pin connector (CENELEC standard) including audio/video input, RGB input

Outputs

Headphone jack - minijack

Sound output:

4W (RMS)

5W (music power)

Power consumption

75W

Dimensions (wxhxd)

513x475x475mm approx.

Weight

21 kg

Accessories supplied

RM-836 Remote Commander (1) IEC designated batteries (2)

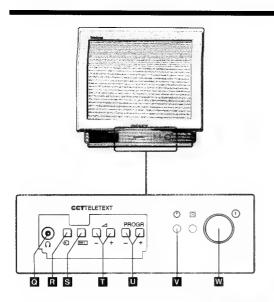
Other features

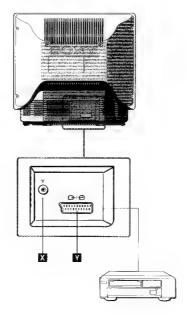
Additional Information

TELETEXT (for KV-M2171U/M2171L)

. Design and specifications are subject to change without notice.

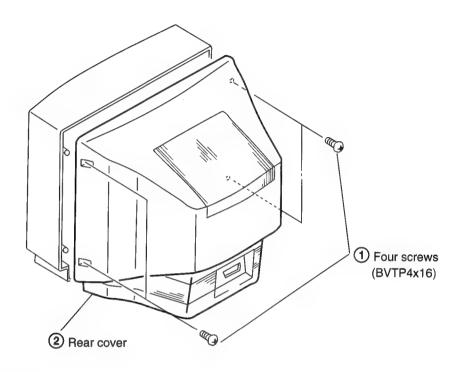
[•] NEVER open the casing yourself.



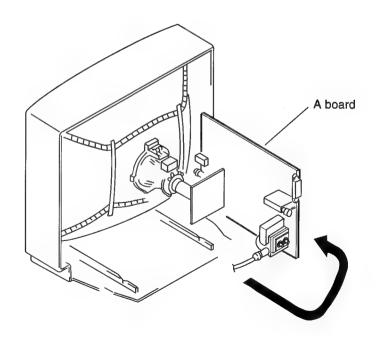


SECTION 2 DISASSEMBLY

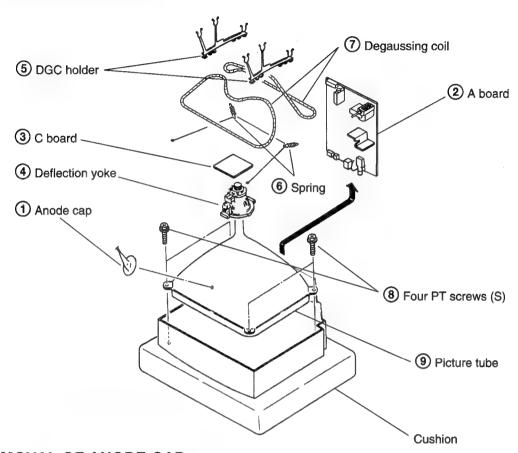
2-1. REAR COVER REMOVAL



2-2. SERVICE POSITION



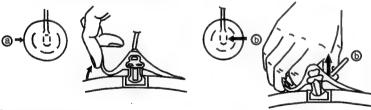
2-3. PICTURE TUBE REMOVAL



REMOVAL OF ANODE-CAP

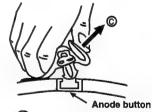
Note: Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT, after removing the anode.

* REMOVING PROCEDURES.



Turn up one side of the rubber cap in the direction indicated by the arrow (a)

2 Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow (b)



When one side of the rubber cap is separated from the anode butto, the anode-cap can be removed by ur ning up the rubber cap and pulling itu p in the direction of the arrow ©

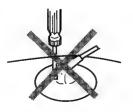
HOW TO HANDLE AN ANODE-CAP

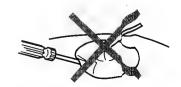
- ① Don't damage the surface of anode-cap with sharp shaped material!
- ② Don't press the rubber hardly not to hurt inside of anode-caps!

A metal fitting called as shatter-hook terminal is built into the rubber.

3 Don't turn the foot of rubber over hardly!

The shatter-hook terminal will stick out or damage the rubber.





SECTION 3 SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with the rated power supply voltage, unless otherwise noted.

The Contrast and Brightness controls should be set as follows unless otherwise noted:

CONTRAST control 80%(or Normal by commander)
☆ BRIGHTNESS control 50%

Perform the adjustments in the following order:

- 1. Beam Landing
- 2. Convergence
- Screen (G2), Drive, White Balance, Sub Colour and Sub Brightness.
- 4. Focus

Note: Test Equipment Required.

- 1. Colour bar/Pattern Generator
- 2. Degausser
- 3. DC Power Supply
- 4. Digital multimeter
- 5. Oscilloscope

Preparation:

- In order to reduce the influence of external magnetic forces on the picture tube, face the TV set in an easterly or westerly direction.
- Turn the power switch for the unit ON and erase the magnetic force using a degausser.

3-1. BEAM LANDING

Demagnetize with a degausser.

- Input an all white raster signal from the pattern generator.
 CONTRAST BRIGHTNESS normal
- 2. Switch the raster signal of the pattern generator to Red.
- 3. Move the deflection yoke backward, and adjust with the purity control so that Red is at the centre and the Blue and Green are evenly spaced at the sides. see (Fig. 3-1 3-3)
- 4. Move the deflection yoke forward, and adjust so that the entire screen becomes Red. (Fig. 3-1)
- 5. Switch the raster signal to Blue and then Green to confirm the condition.
- When the position of the deflection yoke has been determined, tighten it with the deflection yoke mounting screw.
- 7. When the landing at the corners is not correct, adjust by using disk magnets. (Fig. 3-4)

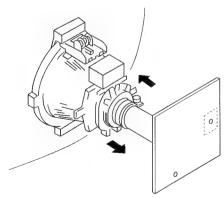


Fig. 3-1

Fig. 3-2

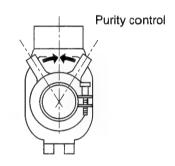


Fig. 3-3

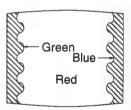
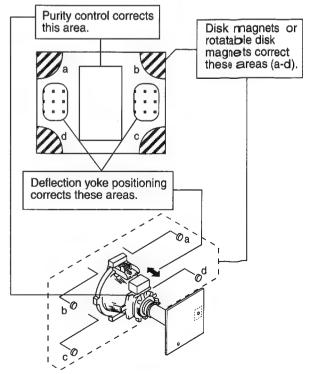


Fig. 3-4

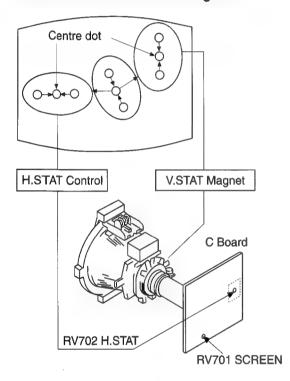


3-2. CONVERGENCE

Preparation:

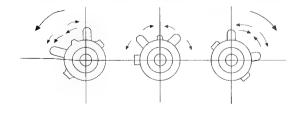
- Before starting, perform FOCUS, H.SIZE, and V.SIZE adjustments.
- Set the BRIGHTNESS control to minimum.
- Input a dot pattern from the pattern generator.

(1) Horizontal and Vertical Static Convergence

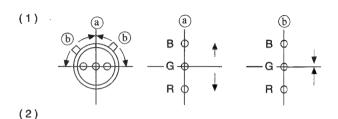


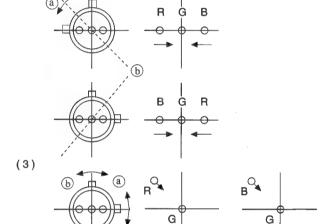
- 1. Adjust the H.STAT control to converge the Red, Green and Blue dots at the centre of the screen. (Horizontal movement)
- 2. Adjust the V.STAT magnet to converge the Red, Green and Blue dots at the centre of the screen. (Vertical movement)
- If the horizontal dots cannot coincide with variable range of the H.STAT convergence, adjust together with the V.STAT convergence while tracking.

(Adjust the convergence by tilting the V.STAT convergence or by opening or closing the V.STAT convergence.)



3. When the V.STAT magnet is moved in the direction of the a and b arrows, the Red, Green and Blue dots move as shown below.

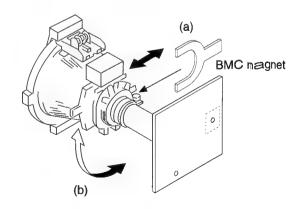




If the Red and Blue dots do not converge with the Green dots, perform the following steps.

- 1. Move the BMC magnet (a) to correct for insufficient H.static convergence.
- 2. Rotate the BMC magnet (b) to correct for insufficient V.static convergence.

In either case, repeat the Beam Landing Adjustment.

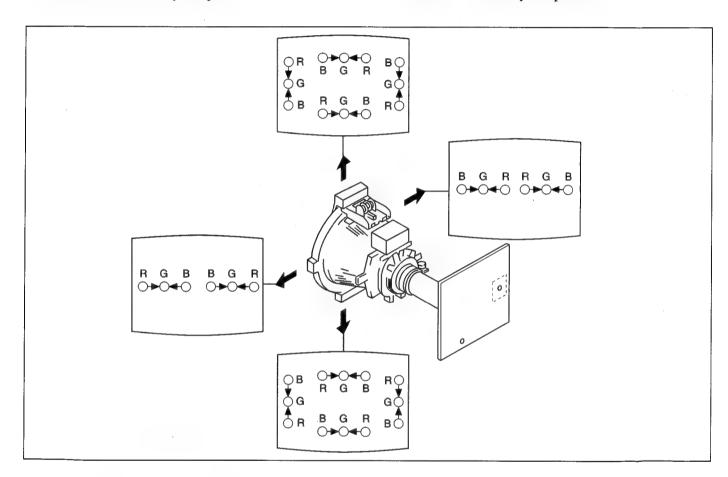


(2) Dynamic Convergence Adjustment

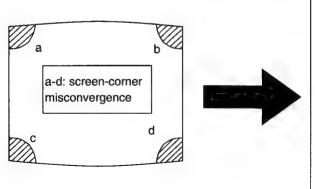
Preparation:

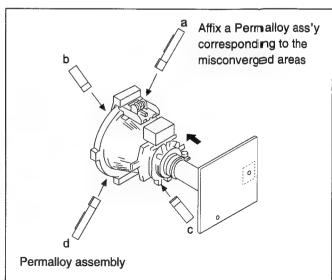
- Before starting to perform the Horizontal and Vertical static convergence adjustment.
- 1. Slightly loosen the deflection yoke screw.
- 2. Remove the deflection yoke spacers.

- 3. Move the deflection yoke for best convergence as shown below.
- 4. Tighten the deflection yoke screw.
- 5. Install the deflection yoke spacers.

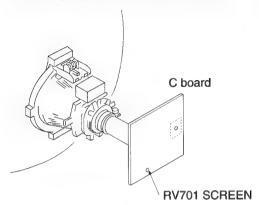


(3) Screen-corner Convergence.





3-3. SCREEN (G2), DRIVE, WHITE BALANCE, SUB COLOUR and SUB BRIGHTNESS.

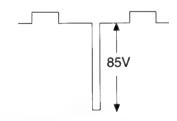


Screen (G2) setting

- Input a O IRE (Black Level) signal from the pattern generator.
- 2. Enter into the Service Mode "Test" "Test" and 38.
- 3. Adjust RV701 until the Down arrow is displayed.
- 4. Adjust RV701 until the Down arrow just disappears.
- Press the TV Button on the Remote Commander to store the data.

Drive Level

- Input a Video signal containing a small area of 100% white on a black background.
- 2. Connect an oscilloscope to Pin (10) of J701 (R OUT) on the C Board.
- 3. Set the Picture to maximum using "Test" Test" and 01.
- 4. Enter into the Service mode (Adjust Menu).
- 5. Using the Blue and Green buttons select "RED HWB".
- Using the Red and Yellow buttons on the Remote Commander adjust until the oscilloscope waveform has an amplitude of 85V.

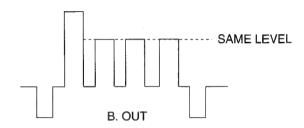


White Balance Adjustment

- 1. Input an all white pattern from the pattern generator.
- Adjust the Colour and Brightness controls to the standard level.
- 3. Enter into the Service Mode.
- 4. Adjust the Green HWB and Blue HWB so that the White Balance becomes optimum.

Sub Colour Adjustment

- 1. Input a PAL colour bar pattern from the pattern generator.
- 2. Connect an oscilloscope to Pin (8) of J701 (B OUT) on the C Board.
- 3. Enter into the Service Mode "Test" Test" and 22.
- 4. Using the Red and Yellow buttons on the Remote Commander adjust until the oscilloscope waveform becomes as follows:



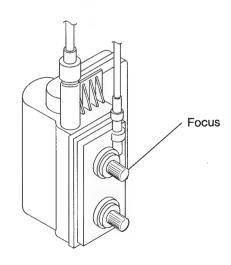
Note: If the TV is able to receive PAL and SECAM transmissions, repeat the above procedure using a Secam colour bar signal.

Sub Brightness Adjustment

- 1. Input a Philips pattern from the pattern generator.
- 2. Enter into the Service Mode "Test" "Test" and 23.
- 3. Using the Red and Yellow buttons on the Remote Commander adjust until the 0 IRE of the grey scale and the cut off are only slightly visible on the screen.

3-4. FOCUS

- 1. Receive a television broadcasting.
- 2. Normalize the picture setting.
- Adjust the focus control on the flyback transformer to become the focus in the centre area properly.
 Bring only the centre area of the screen into focus, the magenta-ring appears on the screen. In this case, adjust the focus to optimize the screen uniformly.



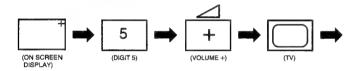
SECTION 4 CIRCUIT ADJUSTMENTS

4-1. ELECTRICAL ADJUSTMENTS

Service adjustment to this model can be performed with the supplied Remote Control Commander RM-836.

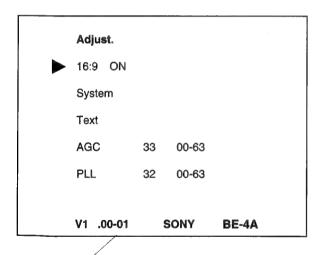
HOW TO ENTER INTO SERVICE MODE

- 1. Turn on the main power of the set and enter into stand-by mode.
- Press the following sequence of buttons on the Remote Control Commander.



"TT--" will appear in the top right corner of the screen Other status information will also be displayed.

3. Press the MENU button on the Remote Commander to obtain the menu on the screen.



Software version

- 4. Press the Blue (Next) or Green (previous) buttons to select the adjustment item from the table.
- 5. Press the Yellow (+) or Red (-) buttons to change the data as required.
- 6. Turn off the power to quit the service mode when adjustments are completed.

Range of adjustments available from the on screen menu system.

A .17 1		
Adjustment	Set	Range
16:9 Off	Select	ON/OFF
		BG-L, BG-DK
System	Select	UK, Eire, BG
Text	Select	EAST/WEST
AGC	Adj.	00 - 63
PLL	Adj.	00 - 63
B&W Delay	Adj.	00 - 63
Ver Size	Adj.	00 - 63
Ver, Breath	00	00 - 63
Par, Ampl	00	00 - 63
Par, Tilt	32	00 - 63
V, Linear	Adj.	00 - 63
Corn, corr	00	00 - 63
V, Cen or EW	Adj.	00 - 63
V, Position	42	00 - 63
H, Centre	Adj.	00 - 63
Blue HWB	Adj.	00 - 63
Green HWB	Adj.	00 - 63
Red HWB	Adj.	00 - 63

4-2. TEST MODE 2:

TT -- Mode is available by pressing the Test button twice, O.S.D 'TT --' appears. The functions described below are available by pressing two digits. To release the 'TT --' mode, press 0 twice, press 'TEST', press 'TV' or switch the TV into Stand-by mode.

00 Switch 'TT' Mode off. 01 Set picture level to maximum. 02 Set picture level to minimum. 03 Set volume to 35%. 04 Set volume to 50%. 05 Set volume to 65%. 06 Set volume to 80%. 07 Ageing condition (picture max., brightness max.). Shipping condition (Analog values are RESET to factory setting, Prog 1 is selected, TTmode switched off, Vol = 35%). 09 Dummy. 10 No function. 11 Dummy 12 Text Picture Level Offset (Enable/Disable) 13 Select Odd / Even field for Non-interlaced teletext. 14 Select Interlaced / Non-interlaced teletext display. Read factory setting from ROM to NVM - Reads Volume, Brightness, Picture, Hue, Sharpness and Colour values from ROM to the actual used values (Last Power Memory). 16 No function 17 Enable / Disable Sharpness Operation. 18 Enable / Disable Teletext Operation. 20 No function. 21 Sub Picture. 22 Sub Colour (Pal / Secam Different Stores) 23 Sub Brightness. 24 Destination System BG/L.		
O2 Set picture level to minimum. O3 Set volume to 35%. O4 Set volume to 50%. O5 Set volume to 65%. O6 Set volume to 80%. O7 Ageing condition (picture max., brightness max.). Shipping condition (Analog values are RESET to factory setting, Prog 1 is selected, TTmode switched off, Vol = 35%). O9 Dummy. 10 No function. 11 Dummy 12 Text Picture Level Offset (Enable/Disable) 13 Select Odd / Even field for Non-interlaced teletext. 14 Select Interlaced / Non-interlaced teletext display. Read factory setting from ROM to NVM - Reads Volume, Brightness, Picture, Hue, Sharpness and Colour values from ROM to the actual used values (Last Power Memory). 16 No function 17 Enable / Disable Sharpness Operation. 18 Enable / Disable Teletext Operation. 19 Enable / Disable NTSC Operation. 20 No function. 21 Sub Picture. 22 Sub Colour (Pal / Secam Different Stores) 23 Sub Brightness.	00	Switch 'TT' Mode off.
O3 Set volume to 35%. O4 Set volume to 50%. O5 Set volume to 65%. O6 Set volume to 80%. O7 Ageing condition (picture max., brightness max.). Shipping condition (Analog values are RESET to factory setting, Prog 1 is selected, TTmode switched off, Vol = 35%). O9 Dummy. 10 No function. 11 Dummy 12 Text Picture Level Offset (Enable/Disable) 13 Select Odd / Even field for Non-interlaced teletext. 14 Select Interlaced / Non-interlaced teletext display. Read factory setting from ROM to NVM - Reads Volume, Brightness, Picture, Hue, Sharpness and Colour values from ROM to the actual used values (Last Power Memory). 16 No function 17 Enable / Disable Sharpness Operation. 18 Enable / Disable Teletext Operation. 19 Enable / Disable NTSC Operation. 20 No function. 21 Sub Picture. 22 Sub Colour (Pal / Secam Different Stores) Sub Brightness.	01	Set picture level to maximum.
04 Set volume to 50%. 05 Set volume to 65%. 06 Set volume to 80%. 07 Ageing condition (picture max., brightness max.). Shipping condition (Analog values are RESET to factory setting, Prog 1 is selected, TTmode switched off, Vol = 35%). 09 Dummy. 10 No function. 11 Dummy 12 Text Picture Level Offset (Enable/Disable) 13 Select Odd / Even field for Non-interlaced teletext. 14 Select Interlaced / Non-interlaced teletext display. Read factory setting from ROM to NVM - Reads Volume, Brightness, Picture, Hue, Sharpness and Colour values from ROM to the actual used values (Last Power Memory). 16 No function 17 Enable / Disable Sharpness Operation. 18 Enable / Disable Teletext Operation. 19 Enable / Disable NTSC Operation. 20 No function. 21 Sub Picture. 22 Sub Colour (Pal / Secam Different Stores) 23 Sub Brightness.	02	Set picture level to minimum.
Set volume to 65%. Set volume to 80%. Ageing condition (picture max., brightness max.). Shipping condition (Analog values are RESET to factory setting, Prog 1 is selected, TTmode switched off, Vol = 35%). Dummy. No function. Text Picture Level Offset (Enable/Disable) Select Odd / Even field for Non-interlaced teletext. Select Interlaced / Non-interlaced teletext display. Read factory setting from ROM to NVM - Reads Volume, Brightness, Picture, Hue, Sharpness and Colour values from ROM to the actual used values (Last Power Memory). No function Reable / Disable Sharpness Operation. Enable / Disable Teletext Operation. Pable / Disable NTSC Operation. No function. Sub Picture. Sub Colour (Pal / Secam Different Stores) Sub Brightness.	03	Set volume to 35%.
O6 Set volume to 80%. O7 Ageing condition (picture max., brightness max.). Shipping condition (Analog values are RESET to factory setting, Prog 1 is selected, TTmode switched off, Vol = 35%). O9 Dummy. 10 No function. 11 Dummy 12 Text Picture Level Offset (Enable/Disable) 13 Select Odd / Even field for Non-interlaced teletext. 14 Select Interlaced / Non-interlaced teletext display. Read factory setting from ROM to NVM - Reads Volume, Brightness, Picture, Hue, Sharpness and Colour values from ROM to the actual used values (Last Power Memory). 16 No function 17 Enable / Disable Sharpness Operation. 18 Enable / Disable Teletext Operation. 19 Enable / Disable NTSC Operation. 20 No function. 21 Sub Picture. 22 Sub Colour (Pal / Secam Different Stores) 23 Sub Brightness.	04	Set volume to 50%.
Ageing condition (picture max., brightness max.). Shipping condition (Analog values are RESET to factory setting, Prog 1 is selected, TTmode switched off, Vol = 35%). Dummy. No function. Text Picture Level Offset (Enable/Disable) Select Odd / Even field for Non-interlaced teletext. Select Interlaced / Non-interlaced teletext display. Read factory setting from ROM to NVM - Reads Volume, Brightness, Picture, Hue, Sharpness and Colour values from ROM to the actual used values (Last Power Memory). No function Reable / Disable Sharpness Operation. Enable / Disable Teletext Operation. Pable / Disable NTSC Operation. No function. Sub Picture. Sub Colour (Pal / Secam Different Stores) Sub Brightness.	05	Set volume to 65%.
Shipping condition (Analog values are RESET to factory setting, Prog 1 is selected, TTmode switched off, Vol = 35%). Dummy. No function. Text Picture Level Offset (Enable/Disable) Select Odd / Even field for Non-interlaced teletext. Select Interlaced / Non-interlaced teletext display. Read factory setting from ROM to NVM - Reads Volume, Brightness, Picture, Hue, Sharpness and Colour values from ROM to the actual used values (Last Power Memory). No function Reable / Disable Sharpness Operation. Enable / Disable Teletext Operation. Pable / Disable NTSC Operation. No function. Sub Picture. Sub Colour (Pal / Secam Different Stores) Sub Brightness.	06	Set volume to 80%.
setting, Prog 1 is selected, TTmode switched off, Vol = 35%). Dummy. No function. Text Picture Level Offset (Enable/Disable) Select Odd / Even field for Non-interlaced teletext. Select Interlaced / Non-interlaced teletext display. Read factory setting from ROM to NVM - Reads Volume, Brightness, Picture, Hue, Sharpness and Colour values from ROM to the actual used values (Last Power Memory). No function Reable / Disable Sharpness Operation. Enable / Disable Teletext Operation. Pinable / Disable NTSC Operation. No function. Sub Picture. Sub Colour (Pal / Secam Different Stores) Sub Brightness.	07	Ageing condition (picture max., brightness max.).
10 No function. 11 Dummy 12 Text Picture Level Offset (Enable/Disable) 13 Select Odd / Even field for Non-interlaced teletext. 14 Select Interlaced / Non-interlaced teletext display. Read factory setting from ROM to NVM - Reads Volume, Brightness, Picture, Hue, Sharpness and Colour values from ROM to the actual used values (Last Power Memory). 16 No function 17 Enable / Disable Sharpness Operation. 18 Enable / Disable Teletext Operation. 19 Enable / Disable NTSC Operation. 20 No function. 21 Sub Picture. 22 Sub Colour (Pal / Secam Different Stores) 23 Sub Brightness.	08	setting, Prog 1 is selected, TTmode switched off,
11 Dummy 12 Text Picture Level Offset (Enable/Disable) 13 Select Odd / Even field for Non-interlaced teletext. 14 Select Interlaced / Non-interlaced teletext display. Read factory setting from ROM to NVM - Reads Volume, Brightness, Picture, Hue, Sharpness and Colour values from ROM to the actual used values (Last Power Memory). 16 No function 17 Enable / Disable Sharpness Operation. 18 Enable / Disable Teletext Operation. 19 Enable / Disable NTSC Operation. 20 No function. 21 Sub Picture. 22 Sub Colour (Pal / Secam Different Stores) 23 Sub Brightness.	09	Dummy.
12 Text Picture Level Offset (Enable/Disable) 13 Select Odd / Even field for Non-interlaced teletext. 14 Select Interlaced / Non-interlaced teletext display. Read factory setting from ROM to NVM - Reads Volume, Brightness, Picture, Hue, Sharpness and Colour values from ROM to the actual used values (Last Power Memory). 16 No function 17 Enable / Disable Sharpness Operation. 18 Enable / Disable Teletext Operation. 19 Enable / Disable NTSC Operation. 20 No function. 21 Sub Picture. 22 Sub Colour (Pal / Secam Different Stores) 23 Sub Brightness.	10	No function.
13 Select Odd / Even field for Non-interlaced teletext. 14 Select Interlaced / Non-interlaced teletext display. Read factory setting from ROM to NVM - Reads Volume, Brightness, Picture, Hue, Sharpness and Colour values from ROM to the actual used values (Last Power Memory). 16 No function 17 Enable / Disable Sharpness Operation. 18 Enable / Disable Teletext Operation. 19 Enable / Disable NTSC Operation. 20 No function. 21 Sub Picture. 22 Sub Colour (Pal / Secam Different Stores) 23 Sub Brightness.	11	Dummy
14 Select Interlaced / Non-interlaced teletext display. Read factory setting from ROM to NVM - Reads Volume, Brightness, Picture, Hue, Sharpness and Colour values from ROM to the actual used values (Last Power Memory). 16 No function 17 Enable / Disable Sharpness Operation. 18 Enable / Disable Teletext Operation. 19 Enable / Disable NTSC Operation. 20 No function. 21 Sub Picture. 22 Sub Colour (Pal / Secam Different Stores) 23 Sub Brightness.	12	Text Picture Level Offset (Enable/Disable)
Read factory setting from ROM to NVM - Reads Volume, Brightness, Picture, Hue, Sharpness and Colour values from ROM to the actual used values (Last Power Memory). 16 No function 17 Enable / Disable Sharpness Operation. 18 Enable / Disable Teletext Operation. 19 Enable / Disable NTSC Operation. 20 No function. 21 Sub Picture. 22 Sub Colour (Pal / Secam Different Stores) 23 Sub Brightness.	13	Select Odd / Even field for Non-interlaced teletext.
Brightness, Picture, Hue, Sharpness and Colour values from ROM to the actual used values (Last Power Memory). No function Enable / Disable Sharpness Operation. Enable / Disable Teletext Operation. Enable / Disable NTSC Operation. No function. Sub Picture. Sub Colour (Pal / Secam Different Stores) Sub Brightness.	14	Select Interlaced / Non-interlaced teletext display.
17 Enable / Disable Sharpness Operation. 18 Enable / Disable Teletext Operation. 19 Enable / Disable NTSC Operation. 20 No function. 21 Sub Picture. 22 Sub Colour (Pal / Secam Different Stores) 23 Sub Brightness.	15	Brightness, Picture, Hue, Sharpness and Colour values from ROM to the actual used values (Last Power
18 Enable / Disable Teletext Operation. 19 Enable / Disable NTSC Operation. 20 No function. 21 Sub Picture. 22 Sub Colour (Pal / Secam Different Stores) 23 Sub Brightness.	16	No function
19 Enable / Disable NTSC Operation. 20 No function. 21 Sub Picture. 22 Sub Colour (Pal / Secam Different Stores) 23 Sub Brightness.	17	Enable / Disable Sharpness Operation.
20 No function. 21 Sub Picture. 22 Sub Colour (Pal / Secam Different Stores) 23 Sub Brightness.	18	Enable / Disable Teletext Operation.
21 Sub Picture. 22 Sub Colour (Pat / Secam Different Stores) 23 Sub Brightness.	19	Enable / Disable NTSC Operation.
22 Sub Colour (Pal / Secam Different Stores) 23 Sub Brightness.	20	No function.
23 Sub Brightness.	21	Sub Picture.
The Bright Cook	22	Sub Colour (Pal / Secam Different Stores)
24 Destination System BG/L.	23	Sub Brightness.
	24	Destination System BG/L.

25	Destination Systems BG/L.
26	Destination Systems I.
27	Destination System I/I'.
28	Destination BG only.
29	Dummy.
30	No function.
31-32	Dummy.
33	Auto AGC Adjust.
34	Auto PLL Adjust.
35-37	Dummy.
38	Enter G2 adjustment mode.
39	Dummy.
40	No function.
41	Re-initialise NVM.
42	Dummy.
43	Re-initialise Geometry settings.
44-47	Dummy
48	Set NVM testbyte to 44h in NVM.
49	Erase NVM testbyte
50	No function.

Note: For Test Modes 41 - 50, it is necessary to ensure that the TV is set to Prog 59.

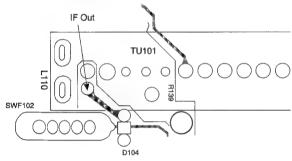
IF ADJUSTMENT (AUTOMATIC)

- Input a 38.9 MHz 100dB

 μ CW signal at the IF Out injection point.
- 2. Enter into service mode and press 34.
- 3. Connect a digital voltmeter to IC101 pin (23).
- 4. Check AFT 2.5V ±0.3V dc.
- 5. Press '00' on the Remote Commander.

SYSTEM L ADJUSTMENT (Italian, French, AEP, Spanish Models)

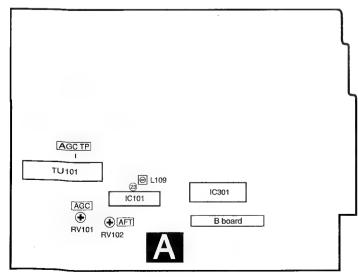
- Input a 33.9MHz 100dBμ CW signal at the IF Out injection point.
- 2. From the On Screen Menu set System to L band 1.
- 3. Connect a digital voltmeter to IC101 pin (23).
- 4. Adjust RV102 AFT for $2.5V \pm 0.3V$ dc.



- A Board Print Side -

AGC ADJUSTMENT

- 1. Receive an off-air signal.
- 2. Enter into the Service adjust menu and select AGC.
- 3. Adjust the data using the Red and Yellow buttons on the Remote Commander so that there is no snow or cross modulation visible on the screen.
- 4. Change the receiving off-air channel, and confirm the above status.



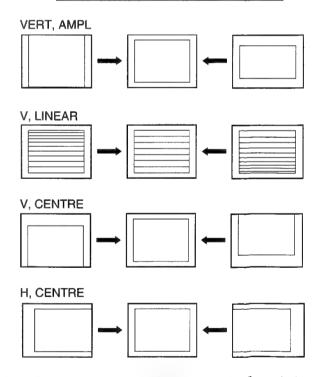
- A Board Component Side -

DEFLECTION SYSTEM ADJUSTMENT

- 1. Enter into the service mode.
- 2. Using the Blue or Green buttons select the Adjust item.
- 3. Press the Yellow button to enter the adjustment submenu.
- 4. Select and adjust each item in order to obtain the optimum image.

See Note on page 23

Adjustment	Set	Range
VERT, AMPL	Adj.	00 - 63
VER, BREATH	00	00 - 63
PAR, AMPL	00	00 - 63
PAR, TILT	32	00 - 63
V, LINEAR	Adj.	00 - 63
CORN, CORR	Adj.	00 - 63
V, CENTRE	Adj.	00 - 63
V, POSITION	42	00 - 63
H, CENTRE	Adj.	00 - 63



Fit the link as required to obtain the correct hor zontal picture size.

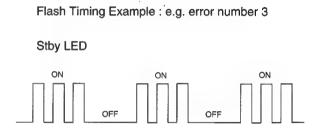
4-3. BE-4A SELF DIAGNOSTIC SOFTWARE

The identification of errors within the BE-4A chassis is triggered in 1 of 2 ways:- 1: Bus busy or 2: Device failure to respond to I²C. In the event of one of these situations arising the software will first try to release the Bus if busy (Failure to do so will report with a continuous flashing LED) and then communicate with each relevant device in turn to establish if a device is faulty. If a device is found to be faulty the relevant device number will be displayed through the LED by a Series of flashes which must be counted (See Table 1), Non fatal errors are reported with this method.

If a fatal error is found, the set will simply stay in whichever state it was when the error occurred, but if a non fatal error occurs the set will try to continue to operate.

Table 1

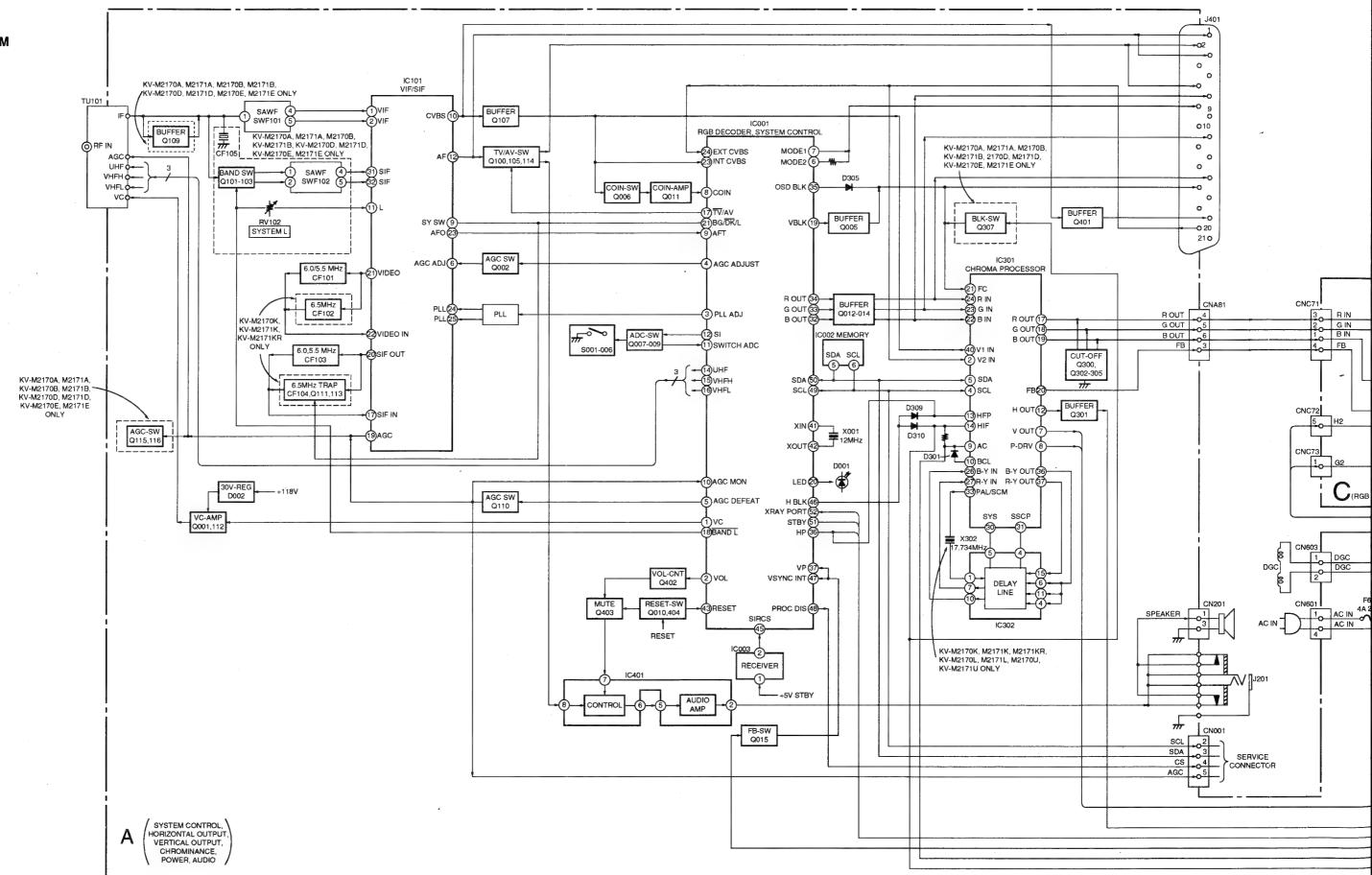
No of Flashes	Meaning
2	IC301 not acknowledging I $^{\circ}$ C transmission, NVM OK.
3	IC301 FAULT (Not OK) - flags
4	IC301 - No H Flyback
5	IC301 - Stack Overflow.
6	Overvoltage / Overcurrent Protection (Pin 52) high.
7	IC002 not acknowledging I ² C transmission, IC301 OK.
8	IC002 and IC301 - No I2C acknowledgment.
9	General I ² C Error (SDA or SCL being held low)
	(IC301, IC001, IC002, CN001)

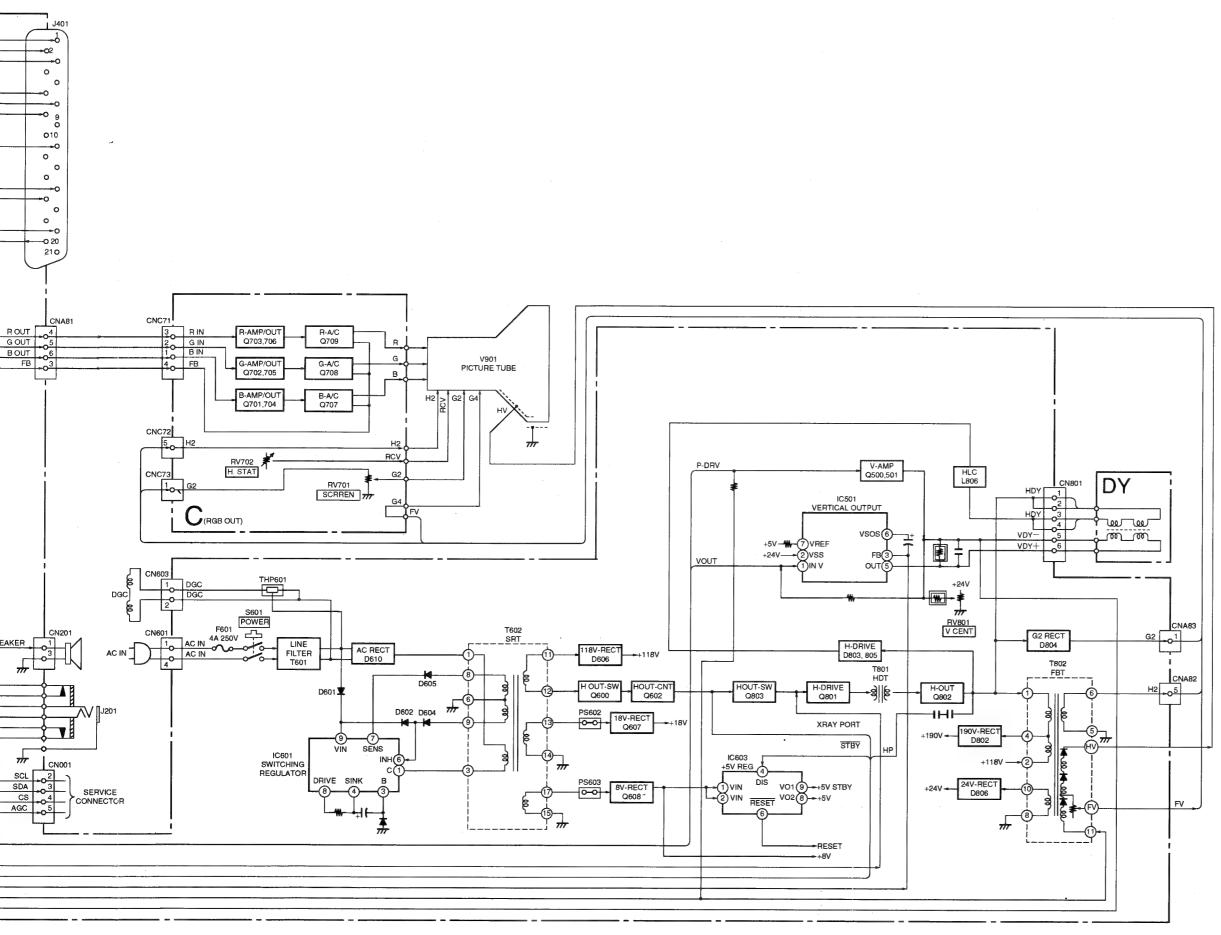


Note: Deflection System Adjustments should not be carried out whilst using an NTSC (60Hz) signal, or if the signal is unlocked.

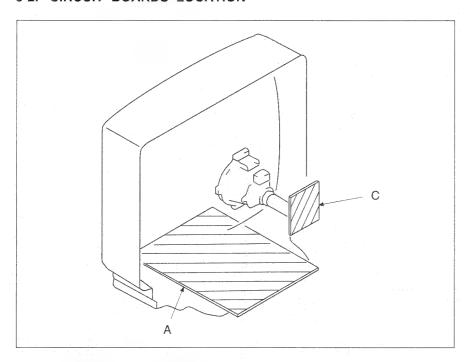
SECTION 5 DIAGRAMS

5-1. BLOCK DIAGRAM





5-2. CIRCUIT BOARDS LOCATION



5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note:

 All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytic and tantalums.

All resistors are in ohms.

k = 1000, M = 1000K

• Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch: 5 mm Rating electrical power ¼ W

• : nonflammable resistor.

• : internal component.

• panel designation, or adjustment for repair.

• All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

: earth - ground.

• m : earth - chassis.

• : no mounted.

Note: The components identified by shading and marked $\hat{\Lambda}$ are critical for safety. Replace only with the part number specified.

Note: Les composants identifies par une trame et une marque ∱ sont critiques pour la securite.

Ne les remplacer que par une piece portant le numero specifie.

Reference information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: RW	NONFLAMMABLE WIREWOUND
	-x ^E	ADJUSTABLE RESISTOR
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE

Readings are taken with a colour-bar signal input.

: ALR HIGH RIPPLE

- Readings are taken with 10M digital multimeter.
- Voltages are dc with respect to ground unless otherwise noted.
- Voltage variations may be noted due to normal production tolerances.
- All voltages are in V.
- Circled numbers are waveform references.
 - B+ bus.
- signal path. (RF)

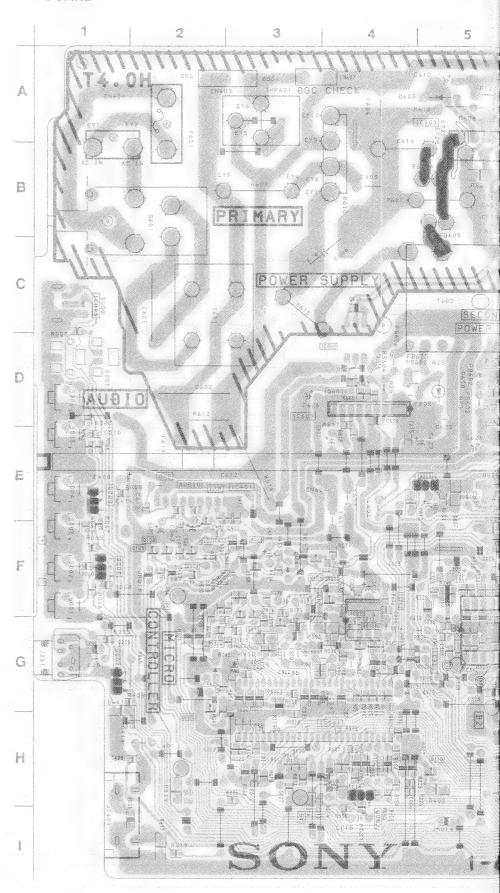
- A BOARD -

			1		1	
-	IC		Q114	F-2	D305	G-2
	IC001	H-4	O Q115	F-10	o D307	G-11
	IC001	G-4	O Q116	F-9	O D308	F-8
	IC002	C-1	Q300	F-7	D401	H-12
-	IC101	G-10	Q301	F-6	D402	H-5
	IC301	G-5	Q302	F-7	D403	H-12
	IC302	H-7	Q303	G-7	D404	H-12
	IC401	E-3	Q304	F-7	D405	H-12
	IC501	D-9	Q305	G-7	D406	H-11
-	IC601	A-5	Q306	G-8	D407	G-12
	IC603	D-3	O Q307	F-8	D408	I-12
-	10000	<u> </u>	Q401	H-10	D409	F-3
	TRANS	STOR	Q402	F-2	D410	1-11
			Q403	F-3	D414	H-2
	Q001	H-8	Q404	F-4	D501	E-8
-	Q002	1-4	Q600	D-6	D600	D-6
	Q005	H-2	Q602	D-6	D601	A-6
2.0	Q006	H-9	Q801	E-6	D602	B-6
	Q007	G-1	Q802	C-9	D603	A-5
	Q008	F-1	Q803	E-5 C-7	D604	B-6
	Q009	E-1	Q804		D605	B-6
	Q010	F-4	Q805	B-7	D606	D-6
	Q011	H-8	DIO	DE	D607 D608	E-6 D-5
-	Q012	G-3			D610	D-5 B-4
	Q013	F-3	D001	D-1	D610	D-6
-2.	Q014	G-2	D002	F-8	D612	E-5
-	Q015	G-4 F-3	D004	F-5	D801	E-7
	Q016	F-3 F-2	D005	G-4	D802	A-8
	Q100		D006	G-3	D802	C-11
	O Q101	G-11	D014	1-4	D803	B-10
	O Q102	G-11	D100	F-3	D805	C-10
98	O Q103	G-11	O D102	G-11	D805	A-11
- 68	Q105	F-2	O D104	G-11	D807	A-11 E-5
1	Q107	H-9	• D105	F-8		
	O Q109	G-10	• D106	F-8	VARIA	
- 1	Q110	H-5	D107	F-2	RESIS	TOR
	• Q111 Q112	G-8 G-12	D109	F-9	o RV102	H-10
2010	• Q113	G-12 G-9	D301	F-6	RV801	E-9
	♥ WIII	G-9	D302	F-7	117001	_ 5
					-	

O Mark : KV-M2170A, M2171A, M2170B, M2171B, M2170D, M2171D, M2170E, 2171E ONLY ■ Mark : KV-M2170K, M2171K, M2171KR ONLY



- A BOARD -





NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

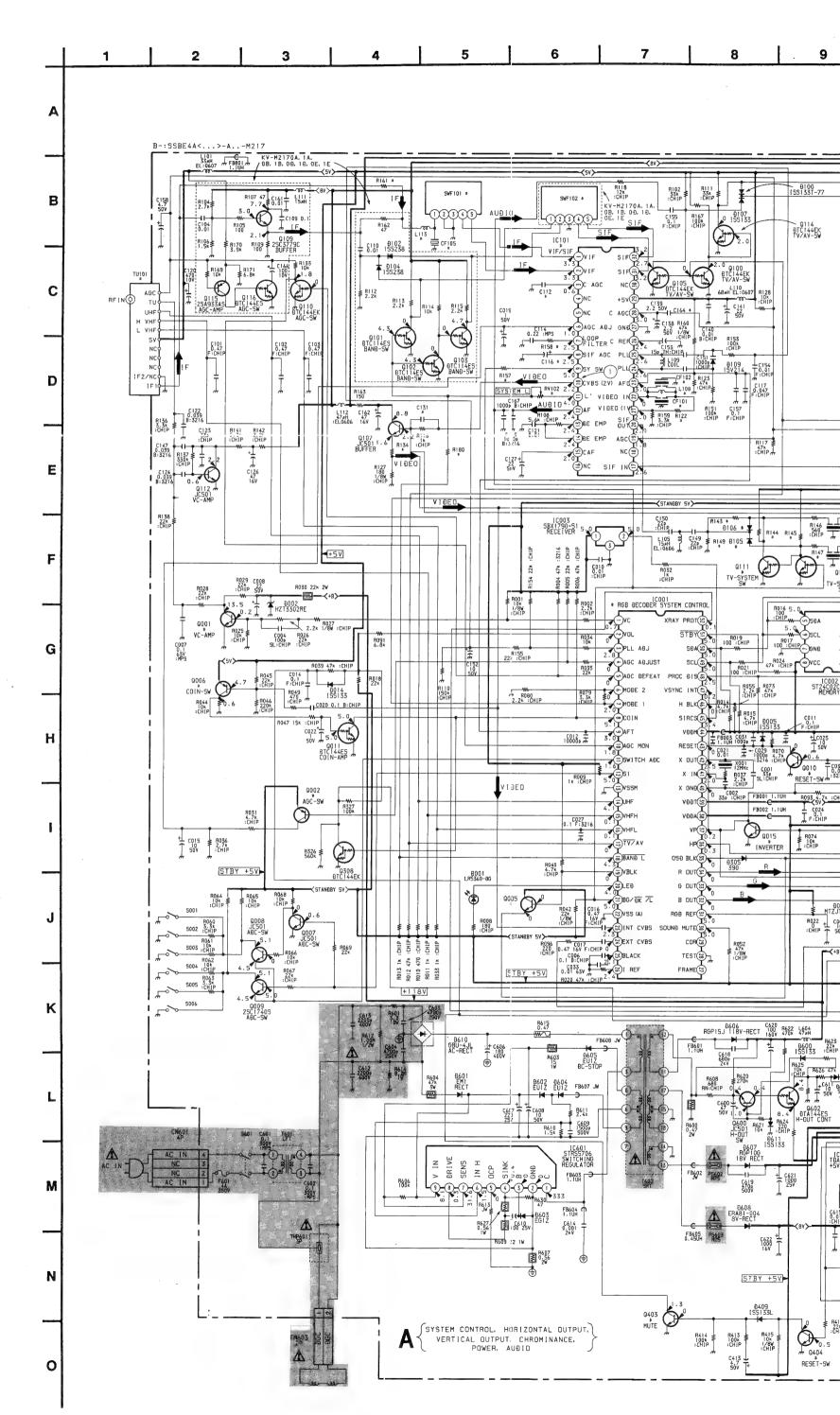
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CH652	10 Page		2 E	lić	(627	P817	HORTZOI		R614
PEON BOC CHECK BANS	7527	A603 • • • • • • • • • • • • • • • • • • •	12	€ numerican \$850				12 E 0806	
EY9 () (614	<u>601</u>			9852 FEBRU) one
EY SYS COS	21		1. (180) (280)			CN.	B	Let one	
RY	00 T		0018		2 C809	812 812 CB1	J802		R. B. B. S.
	FB603 (610)	A (2)	1000	1036 Z					7618
WER SUPPLY			15v 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		08	D cg			923 023
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[16402] F 1640	1 N25 Z T	0 = 0.1 C 6 1 6		# (5) \$\bar{\pi}\$ = Ref(\$\text{\$\ext{\$\text{\$\exititt{\$\text{\$\exititt{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\texititt{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\tex					H. C. S.
0.50 L		Sealer Sealer Sealer Sealer Pro-	To the case of	(50) 1 REGIZ 11 B	TICSETT AND	The second secon	RBZD	C803 L8	56
1E403	2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -			52			S C. 1805	2 [387] 2000 [3500	Torre Torre
	NIL ME HOUS (1/2)	4-1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		a jagua	1310-5-()	20 No American (1990)	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	E 2.5
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	Service of the control of the contro		The state of the s		Radio Company	2176 (9)		Satu.	
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	(0.110) REDOS					The Price of the P	132 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	9336	
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12 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Section 1997	CHROM					2 1 (0) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1		1133 0 2 8 1 1 2 1 0 2 8
DNY"		CHROMA DUNGEN 7-785	Common the common that the com	The second secon		## TUP	F BEE	RATIO CONTROL OF THE PROPERTY	102 stos

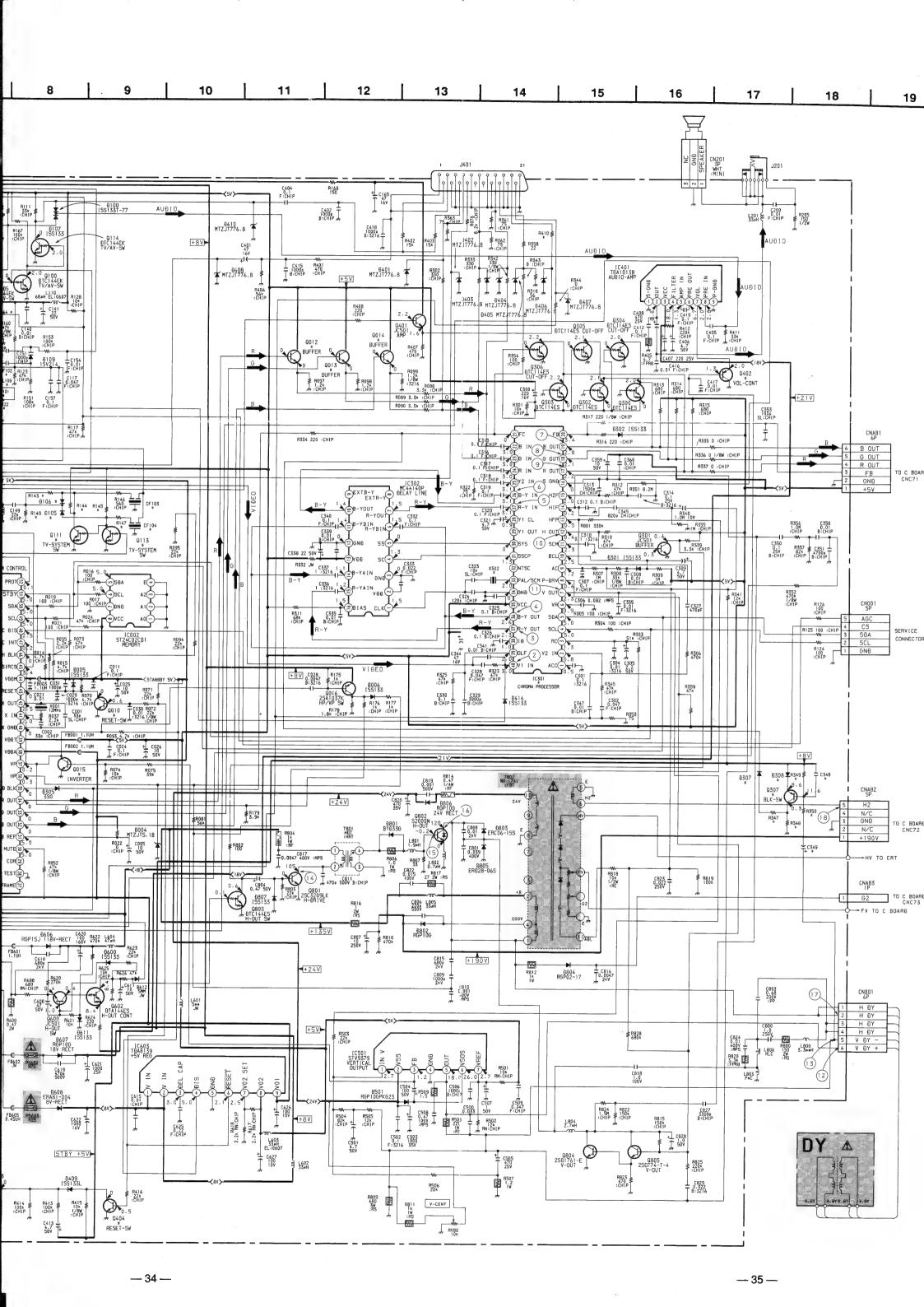
A BOARD * MARK

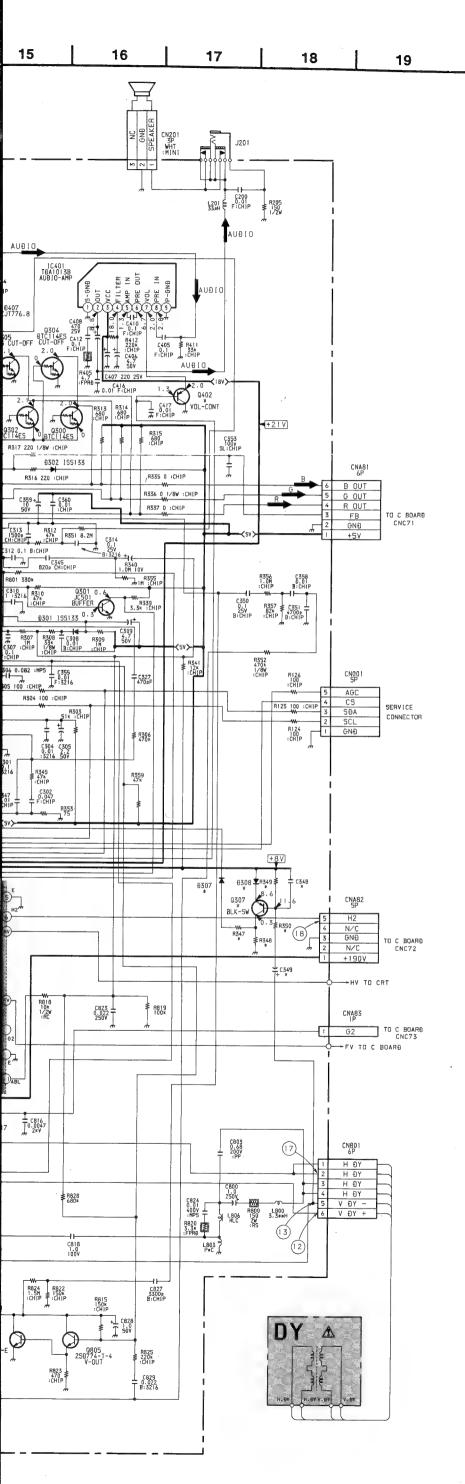
Model Ref. No.	M2170A M2171A	M2170B M2171B	M2170D M2171D	M2170E M2171E	M2170K M2171K	M2171KR	M2170L M2171L	M2170L M2171L
C112	0.1	0.1	0.1	0.1			as a coltrased v	ersers ex e
C116	2.2 50V	2.2 50V	2.2 50V	2.2 50V			-	
2131		-	. –		0.001	0.001	-	-
2164	1	1	1	1	-	_	-	
2348	0.01	0.01	0.01	0.01			-	_
2349	22 50V	22 50V	22 50V	22 50V		E		
CF101	5.5 / 5.74MHz	5.5 / 6.5MHz	5.5 / 5.74MHz	5.5 / 5.74MHz	5.5 / 5.74MHz	5.5 / 5.74MHz	6.0 / 6.5MHz	6.0 / 6.5MH
CF102	- 0.0 / 0.7 4IVII IZ	3.37 0.3Mil 12	J.37.3.7-HVI(12	3.37 3.7 4WH12			0.070.30012	0.07 0.51411
		a seeding to a	e enue	5.5MHz	6.5MHz	6.5MHz		0.0141
CF103	5.5MHz	5.5MHz	5.5MHz	7.52	5.5MHz	5.5MHz	6.0MHz	6.0MHz
CF104	9.92				6.5MHz	6.5MHz	-	
CF105	5.5MHz	5.5MHz	5.5MHz	5.5MHz			-	-
D105					1SS133	1SS133	· · · · · · · · · · · · · · · · · · ·	- "
D106	S = 3.7	<u> </u>		The Hardward	1SS133	1SS133	-	
0307	155133	1SS133	155133	1SS133	· Variable see	-		-
0308	1SS133	1SS133	1SS133	1SS133	-	_	_	1 -
B801		4-			1.1μΗ	1.1μΗ	1.1μΗ	1.1µH
C001				Refer to "A board	* mark-2" table			
C101	TDA9806	TDA9812	TDA9806	TDA9806	TDA9806	TDA9806	TDA9806	TDA9806
C301	MC44007P	MC44002P	MC44002P	MC44007P	MC44002P	MC44002P	MC44007P	MC44007F
_108	8.2μΗ	8.2μΗ	8.2µH	8.2µH	4.7μH	4.7μΗ	8.2µH	8.2µH
_113	0.22μΗ	0.22μH	0.22µH	0.22μΗ	0.22μΗ	0.22µH	0.22μΗ	0 : CHIP
2001	JC501	JC501	JC501	JC501	2SC2410S	2SC2410S	2SC2410S	2SC24105
2002	JA101	JA101	JA101	JA101	2SC933AS	2SC933AS	2SC933AS	2SC933A5
2005	JC501	JC501	JC501	JC501	2SC2412K	2SC2412K	2SC2412K	2SC2412H
2006	JA101	JA101	JA101	<u> </u>	2SC933AS			
2010				JA101		2SC933AS	2SC933AS	2SC933A5
	JC501	JC501	JC501	JC501	2SC2412K	2SC2412K	2SC2412K	2SC2412
2012	JC501	JC501	JC501	JC501	2SC2412K	2SC2412K	2SC2412K	2SC2412F
2013	JC501	JC501	JC501	JC501	2SC2412K	2SC2412K	2SC2412K	2SC2412
Q014	JC501	JC501	JC501	JC501	2SC2412K	2SC2412K	2SC2412K	2SC2412F
Q015	JC501	JC501	JC501	JC501	2SC2412K	2SC2412K	2SC2412K	2SC2412F
2111			Land Aparthy		DTC144ES	DTC144ES		
Q113	e designa com planta conservata de la compania del compania del compania de la compania del la compania de la c			÷ 131.3	DTC144ES	DTC144ES		
2307	2SA933AS	2SA933AS	2SA933AS	2SA933AS	+		1	
Q402	JA101	JA101	JA101	JA101	2SC933AS	2SC933AS	2SC933AS	2SC933AS
2403	JC501	JC501	JC501	JC501	2SC2412K	2SC2412K	2SC2412K	2SC2412k
2404	JC501	JC501	JC501	JC501	2SC2412K	2SC2412K	2SC2412K	2SC2412k
3122	150	150	150	150	100	100	150	150
R134	180	180	180	180	180	180	150	150
R143	0	0	. 0	0	-, -	_	0	0
R144				_	2.2K	2.2K	_	
3145			_		2.2K	2.2K		
R147				_	560	560		
3149				_	2.2K	2.2K		
R157								<u> </u>
	1K	1K	1K	1K	- 1	-	-	-
R158	180	180	180	180	390	390	390	390
R161	0	-	0	. 0.	0	0	0	0
R180	1K	1K	1K	1K	1	= '		
R347	470	470	470	470	- "		-	
348	10K	10K	10K	10K	+ 1		- 1	-
R349	220K	220K	220K	220K	-, 4		. – ' ; '	
350	220	220	220	220				
R355	39µF 10V	39μF 10V	39μF 10V	39µF 10V	47K	47K	47K	47K
R358	47K	47K	47K	47K	39µF 10V	39μF 10V	39µF 10V	39μF 10 ¹
R410	75	75	75	75	75	75	68	68
RV102	22K	22K	22K	22K	,3			-
WF101	OPWG1963	OFWK3953	OPWG1963	OPWG1963	OFWK2950	OFWK2950	OFWJ1952M	OFWJ1952
U101								
ניטוטו 1.	TELE1X001A	BT-AC401	BT-AC401	BT-AC401	BT-AC401	BT-AC401	BT-AC401	BT-AC401

A BOARD * MARK-2 (IC001)

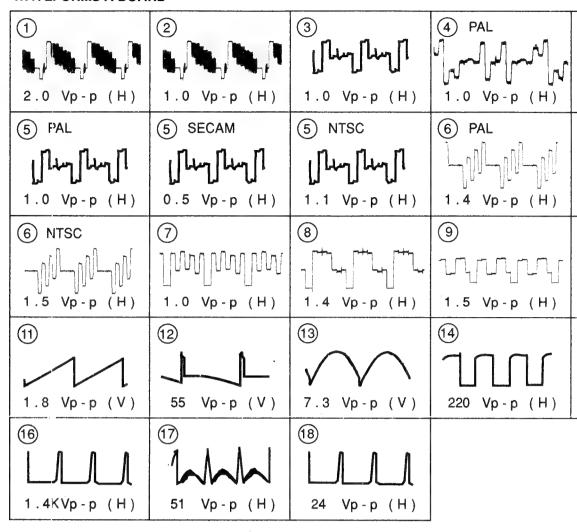
KV-M2170A/M2170B/M2170D/M2170E/M2170K/M2170	L/M2170U SAA5288ZP/007
KV-M2171A/M2171B/M2171D/M2171E/M2171K/M2171	L/M2171U SAA5290ZP/007
KV-M2171KR	SAA5290ZP/006



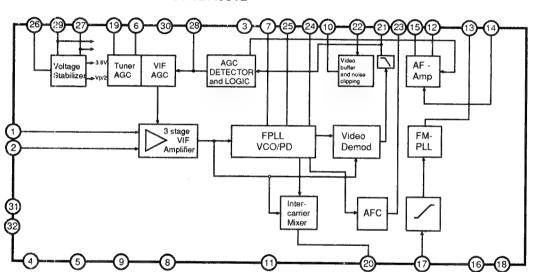




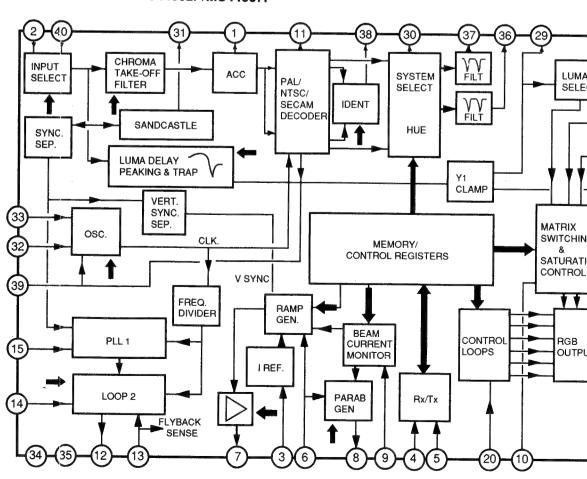
WAVEFORMS A BOARD



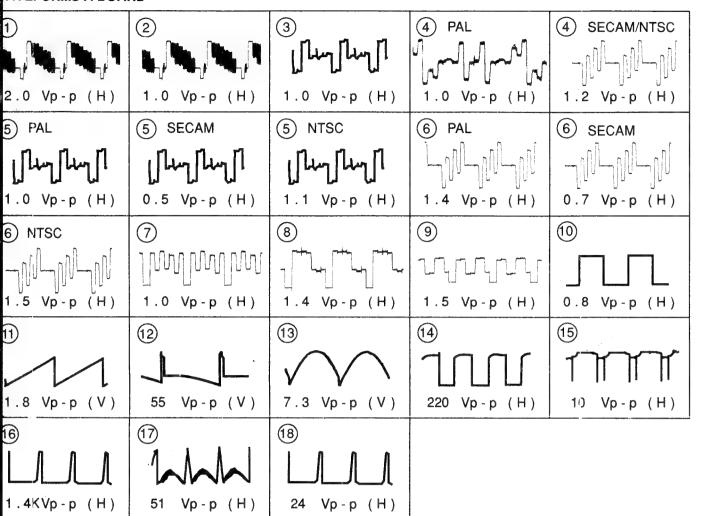
A BOARD IC101 TDA9806/TDA9812



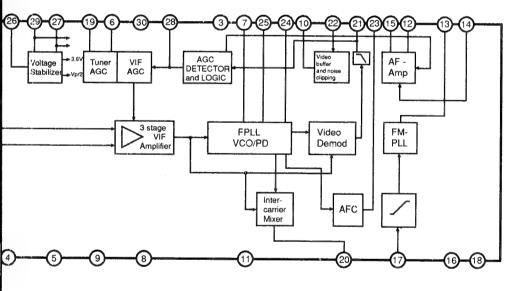
A BOARD IC301 MC44002P/MC44007P



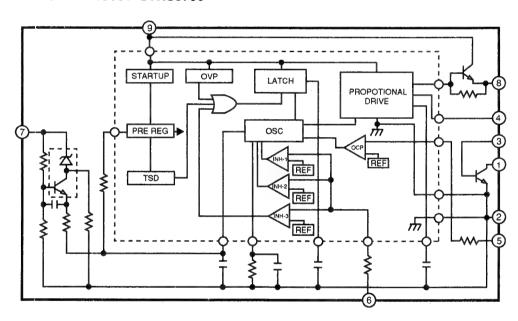
AVEFORMS A BOARD



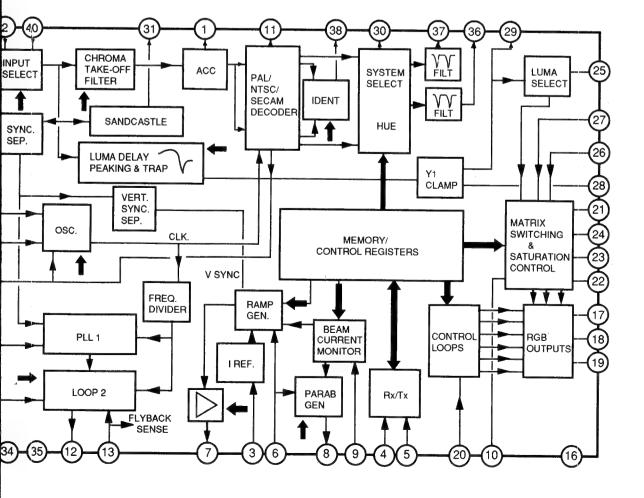
BOARD IC101 TDA9806/TDA9812



A BOARD IC601 STRS5706

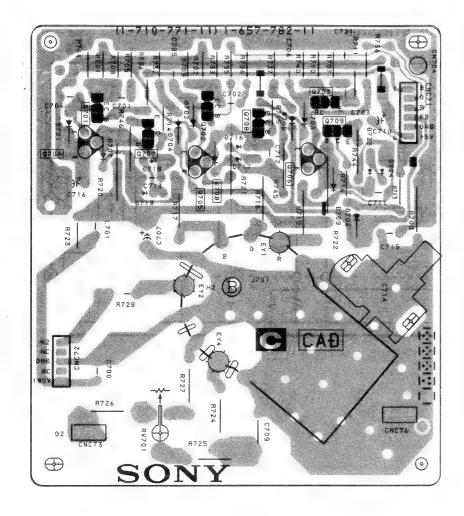


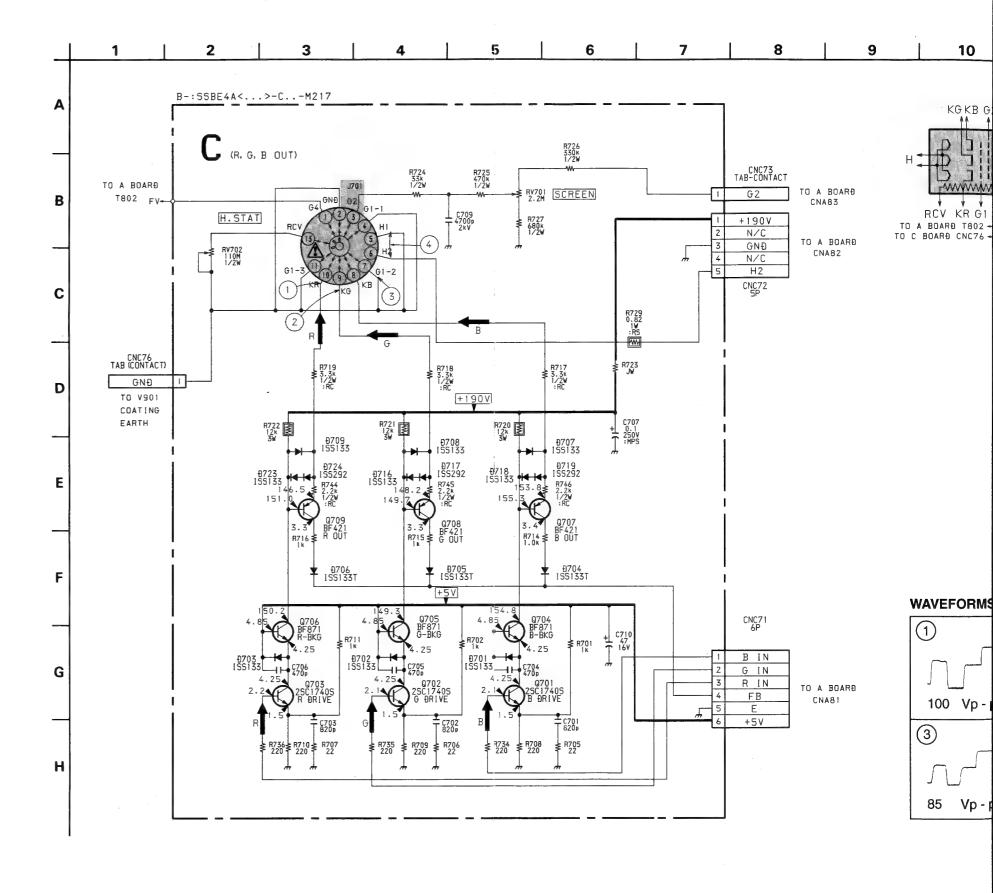
BOARD IC301 MC44002P/MC44007P

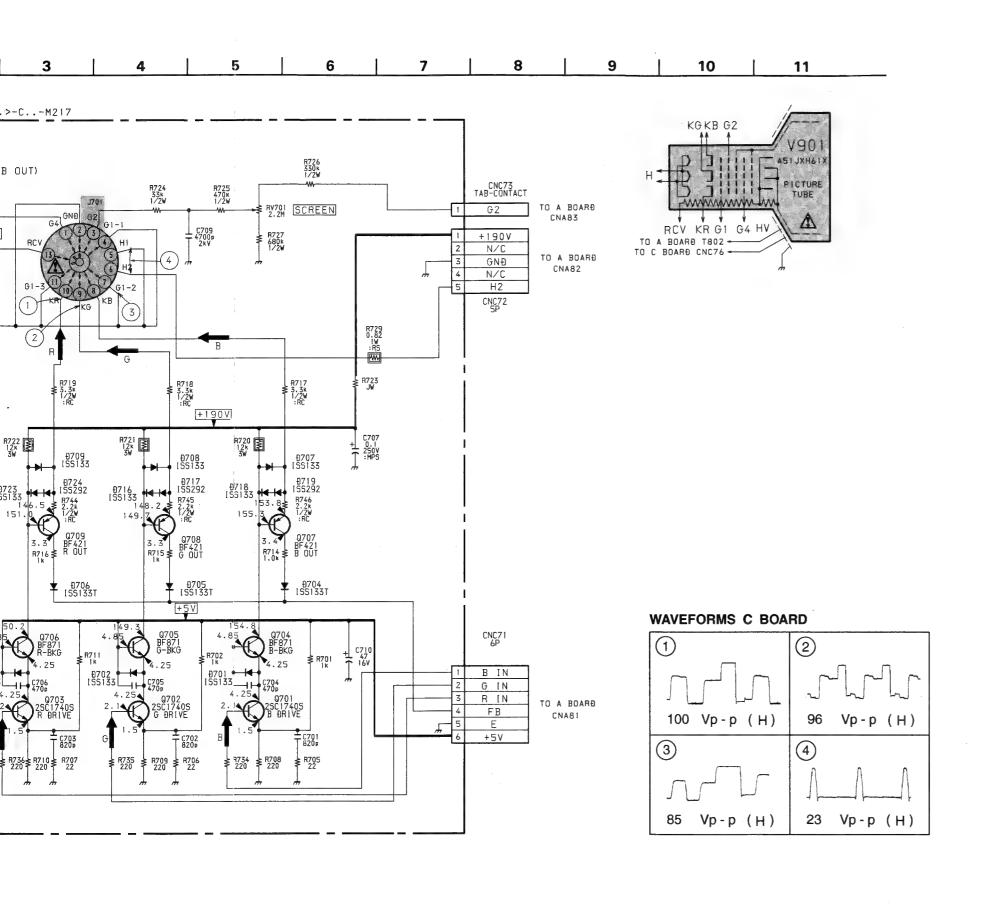




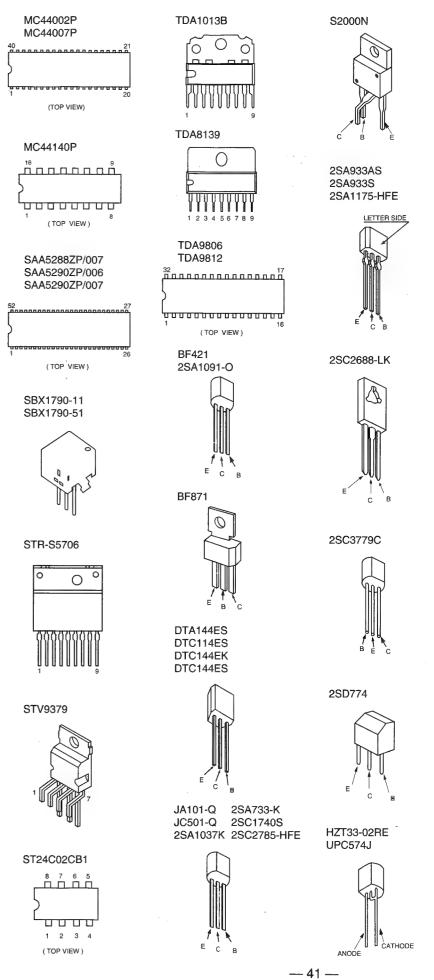
- C BOARD -







5-4. SEMICONDUCTORS



BYD33G ERD2

EG-1Z-V1 EU-1: EGP20G

ERC06-15S 1SS1 ERD28-06S 1SS2

ERA81-004 RD5.1

ERA83-006 RD6.8

MTZJ-5.1B 1SS1:

GBU4JL-6088

RGP15J-6040

1SV214

LR5360-DG

0

MTZJ-6.8A

EL1Z

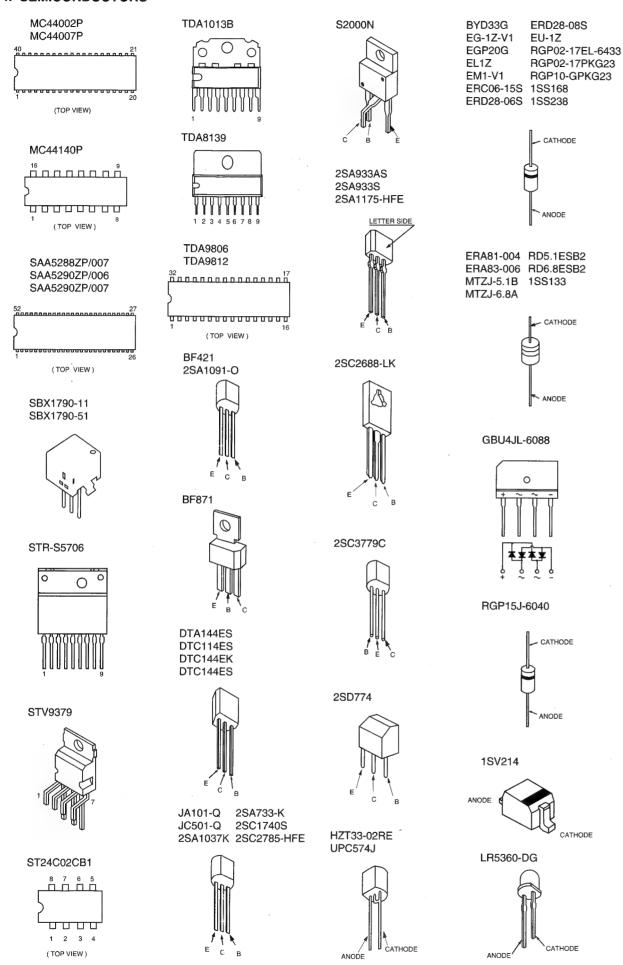
EM1-V1

RGP

RGP

RGP:

5-4. SEMICONDUCTORS



— 41 —

SECTION 6 EXPLODED VIEWS

NOTE:

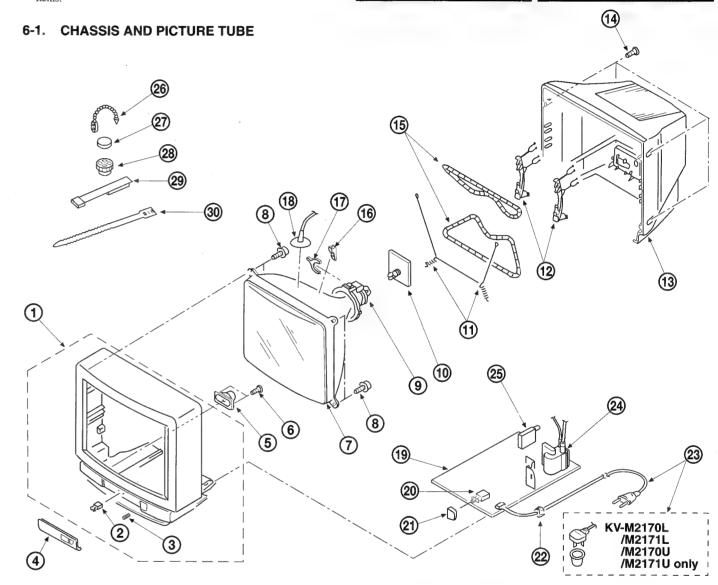
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remarks column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items

The components identified by shading and marked . are critical for safety.

Replace only with the part number specified.

Les composants identifies par une trame et une marque / sont critiques pour la securite.

Ne les remplacer que par une piece portant le numero specifie.



REF NO	PART NO	DESCRIPTION REMARK	REF NO	PART NO	DESCRIPTION	REMARK
1	X-4200-229-2	BEZNET ASSY (KV-M2170A/M2171A/M2170B	6	4-039-356-01	SCREW (3x12), (+)	BV TAPPING
		/M2171B/M2170D/M2171D/M2170E/M2171E)	7 A	8-738-784-05	PICTURE TUBE (SD-	169) (A51JXH61X)
	X-4200-229-1	BEZNET ASSY (KV-M2170K/M2171K/M2171KR	8	4-036-189-01	SCREW (S), PT	
		/M2170L/M2171L/M2170U/M2171U)	9 /	8-451-295-45	DEFLECTION YORE (Y21PF2BA)
2	4-392-036-01	CATCHER, PUSH	10	*A-1638-074-A	C BOARD, COMPLETE	2000 NO. 100 N
3	4-387-829-11	SPRING				/M2171A/M2170B/M2171B
4	4-203-120-31	DOOR, CONTROL			•	/M2171D/M2170E/M2171E)
		(KV-M2170A/M2170B/M2170D/M2170E)		*A-1638-068-A	C BOARD, COMPLETE	
	4-203-120-41	DOOR, CONTROL (KV-M2171A)				/M2171K/M2171KR
	4-203-120-21	DOOR, CONTROL (KV-M2171B/M2171D/M2171E)				/M2171L/M2170U/M2171U)
	4-203-120-11	DOOR, CONTROL (KV-M2170K/M2170L/M2170U)	11	4-369-318-21	SPRING, TENSION	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	4-203-120-01	DOOR, CONTROL			2011,2010	
		(KV-M2171K/M2171KR/M2171L/M2171U)				•
5	1-503-258-21	SPEAKER				

The components identified by shading and marked A are critical for safety.

Replace only with the part number specified.

Les composants identifies par une trame et une marque 🖍 sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

REF NO	PART NO	DESCRIPTION	REMARK	REF NO	PART NO	DESCRIPTION	REMARK
12	*4-386-622-11	BAND, DGC (KV-M217 /M2171B/M2170D/M217	0A/M2171A/M2170B 1D/M2170E/M2171E)	25	1-693-303-11	TUNER (TELE1X001A)	170A/M2171A/M2171KR)
	*4-386-622-01	BAND, DGC (KV-M217	0K/M2171K/M2171KR 1L/M2170U/M2171U)		1-693-331-00	TUNER (BT-AC401)	(KV-M2170B/M2171B (2171D/M2170E/M2171E)
13	4-200-732-01		0A/M2171A/M2170B		1-693-310-11 1-693-302-11	TUNER (TELE4X002A) TUNER (UV1315)	(KV-M2170K/M2171K) (KV-M2170L/M2171L)
	4-200-673-01	COVER, REAR (KV-M217	0K/M2171K/M2171KR 1L/M2170U/M2171U)	26	8-598-333-00 4-308-870-00	TUNER (BT-AU601) CLIP, LEAD WIRE	(KV-M2170U/M2171U)
14	4-039-358-01	SCREW (4x16), (+) BV T		27	1-452-032-00	MAGNET, DISK; 10MM	0
5 · E	1-460-090-21	COIL, DEGARSSING		28	1-452-094-00	MAGNET, ROTATABLE D	
1441		(EV-M2170A/M2170B/M217	A A A A A A A A A A A A A A A A A A A	29	X-4309-608-0	PERMALLOY ASSY, CON	
1994		/#3170K/#3171K/#217	LKR/M21/UL/R22/1L	30	3-701-007-00	BAND, BINDING	
	1-426-145-00	/M2170U/M2171U) COLL INGAUSSING					
Hit		(2) (2) (2) (2) (2) (2) (2) (2) (2) (2)	1A/M2171B/M2170D4				
16	3-704-495-01	SPACER, DY	AND DAMES ASSESSMENT OF STREET				
17	1-452-277-00	MAGNET, BMC					
以 11.44	1-1340-006-12	CAP ABSY, HIGH-VOLTAGE					
4114			1A/M2070B/42171B				
			10/M217(B/N21718)				
11114	1+540-007-11	CAP ASSY, HIGH-VOLTAGE					
****	33	(RV-W2170R/H217					
19	*A-1632-310-A	A BOARD, COMPLETE (KV-	116/ 421700/021710 }				
	*A-1632-310-A	A BOARD, COMPLETE (KV-					
	*A-1632-314-A		M2170B)				
	*A-1632-315-A		M2171B)				
	*A-1632-308-A	A BOARD, COMPLETE (KV-	M2170D)				
	*A-1632-307-A	A BOARD, COMPLETE (KV-	M2171D)				
	*A-1632-313-A		M2170E)				
	*A-1632-311-A		M2171E)				
	*A-1632-306-A		M2170K)				
	*A-1632-304-A	-	M2171K)'				
	*A-1632-305-A *A-1632-303-A	-	M2171KR) M2170L)				
	*A-1632-303-A		M2171L)				
	*A-1632-301-A		M2170U)				
	*A-1632-300-A	A BOARD, COMPLETE (KV-					
0		SWITCH, PUSH LAC PONES					
21	4-203-121-01	BUTTON, POWER (KV-M217					
		/M2171KR/M2170L/M217					
	4-203-121-11	BUTTON, POWER (KV-M217					
10	4 200 004 04		1D/M2170E/M2171E)				
22	4-389-201-01	HOLDER, AC CORD					
	(1) 1-690 -270-21	CORD, POWER (WITH COM					
UNE	初始的 法主任 计		1A/M2170B/M2171B 1D/M2170B/M2171B				
THE K	4-590-460-11		ECTOR) 7.0a/250V				
	All an All		K/M2171K/H2171KB				
	11-550-762-11	CORD, POWER (WITH PLUC					
			11/M21700/M21710)				
	本語3-199-11	TRANSPORMER ASSY. PLYE					

SECTION 7

ELECTRICAL PARTS LIST

When indicating parts by reference number, please include the board name.

CAPACITORS

COILS

MF: mF, PF: mmF

 $MMH: mH, \mu H: mH$

 Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

 All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS

- All resistors are in ohms
- F: nonflammable

The components identified by shading and marked A are critical for safety.

Replace only with the part number specified.

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION		REMARK
	*A-1632-310-A	A BOARD, COMPLETE (KV-M2170A)		C017 C019	1-164-005-11 1-124-903-11	CERAMIC CHIP 0.47MF	20%	16V 50V
	*A-1632-309-A	A BOARD, COMPLETE (KV-M2171A)				CERAMIC CHIP 0.1MF	10%	25V
	*A-1632-314-A	A BOARD, COMPLETE (KV-M2170B)		C020 C021	1-163-071-91	CERAMIC CHIP 0.01MF		50V
		A BOARD, COMPLETE (KV-M2171B)		C022 C024	1-124-903-11 1-163-038-91	CERAMIC CHIP 0.1MF	20%	50V 25V
		A BOARD, COMPLETE (KV-M2170D)		C025	1-126-964-11	ELECT 10MF	20%	50V
		*******		C026	1-126-964-11	ELECT 10MF CERAMIC CHIP 100000PF	20%	50V 25V
		A BOARD, COMPLETE (KV-M2171D)		C027 C028	1-163-055-91	CERAMIC CHIP 0.0047ME	10%	50V
	*A-1632-313-A	A BOARD, COMPLETE (KV-M2170E)		C029 C030		CERAMIC CHIP 1000PF CERAMIC CHIP 10000PF	10% 10%	50V -100V
	*A-1632-311-A	A BOARD, COMPLETE (KV-M2171E)		C031	1-163-009-91	CERAMIC CHIP 1000PF	5%	25V
	*A-1632-306-A	A BOARD, COMPLETE (KV-M2170K)		C033	1-137-126-91	FILM 0.01MF	5%	63V 16V
	*A-1632-304-A	A BOARD, COMPLETE (KV-M2171K)		C101 C102	1-164-005-11	CERAMIC CHIP 0.47MF CERAMIC CHIP 0.47MF		16V
		A BOARD, COMPLETE (KV-M2171KF		C103	1-164-005-11	CERAMIC CHIP 0.47MF		16V
		**********		C104	1-163-021-91	CERAMIC CHIP 0.01MF (KV-M2170A/M2171A/M21	10% 70B/M2171	50V B/M2170D
		A BOARD, COMPLETE (KV-M2170L)		2100	1 162 020 01	M2171D/M2170E/M21		•
	*A-1632-302-A	A BOARD, COMPLETE (KV-M2171L)		C109	1-163-038-91	CERAMIC CHIP 0.1MF (KV-M2170A/M2171A/M21		25V B/M2170D
	*A-1632-301-A	A BOARD, COMPLETE (KV-M2170U)				M2171D/M2170E/M21	.71E)	
	*A-1632-300-A	A BOARD, COMPLETE (KV-M2171U))	C110	1-163-021-91	CERAMIC CHIP 0.01MF (KV-M2170A/M2171A/M21 M2171D/M2170E/M21	70B/M2171	50V B/M2170D
	4-202-373-01 4-368-683-21	SPACER, INSULATING SPRING, IC SPRING, TRANSISTOR SCREW (M3X10), P, SW (+)		C112	1-137-399-11	(KV-M2170A/M2171A/M21 M2171D/M2170E/M21	.71E)	
		RIVET (DIA. 3.5), NYLON		C114 C116	1-136-169-00 1-124-925-11		5% 20%	50 V
	< CAI	PACITOR >				(KV-M2170A/M2171A/M21 M2171D/M2170E/M21		B/M2170D
C001	1-163-105-00	CERAMIC CHIP 33PF 5%	507	C117	1-163-035-00	CERAMIC CHIP 0.047MF	,,,,,	50 V
C002 C004	1-163-105-00	CERAMIC CHIP 33PF 5% CERAMIC CHIP 100PF 5%	50V 50V	C120	1-126-925-11	ELECT 470MF	20%	10 V
C005	1-126-964-11	ELECT 10MF 20%	50V	C121	1-136-153-00		5%	50 V
C006	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V	C122		CERAMIC CHIP 0.039MF	10%	50 V
0007			C2**	C123		CERAMIC CHIP 33PF CERAMIC CHIP 0.039MF	5% 10%	50 V 50 V
C007 C008	1-130-777-00	FILM 0.1MF 5% ELECT 22MF 20%	63V 50V	C124	1-104-003-11	CERMINIC CHIP U.USSMF	100	J0 ¥
C010	1-128-551-11	CERAMIC CHIP 0.01MF 10%		C126	1-104-658-91	ELECT 47MF	20%	16 V
C011		CERAMIC CHIP 0.1MF	25V	C127	1-128-551-11		20%	50 V
C012		CERAMIC CHIP 10000PF	50V	C131	1-163-141-00		10%	50 V
							OK/M2171K	
C014	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C138	1-124-925-11	ELECT 2.2MF	20%	50 V
C015 C016	1-126-964-11 1-164-005-11	ELECT 10MF 20% CERAMIC CHIP 0.47MF	50V 16V	C139	1-124-925-11	ELECT 2.2MF	20%	. 50♥

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REF.NO.	PART NO.	DESCRIPTION	F	REMARK	REF.NO.	PART NO.	DESCRIPTION	ON		REMARK
C140 C141 C147 C149	1-163-021-91 1-128-551-11 1-164-665-11 1-163-101-00		10% 20% 10% 5%	50V 50V 50V 50V	C339 C340 C341 C344	1-163-021-91 1-163-038-91 1-163-021-91 1-104-658-91	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP ELECT	0.1MF	10% 10% 20%	50V 25V 50V 50V
C150 C151 C152 C153 C154	1-163-101-00 1-163-009-91 1-126-964-11 1-163-470-91 1-163-031-91		5% 10% 20% 5%	50V 50V 50V 50V 50V	C345 C347 C348	1-163-139-00 1-163-021-91 1-163-031-91	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP (KV-M2170A/M2 M2171D/M2	0.01MF 0.01MF		50V 50V 50V /M2170D/
C155 C157 C158 C161	1-163-038-91 1-163-038-91 1-124-927-11 1-163-021-91	CERAMIC CHIP 0.1MF CERAMIC CHIP 0.1MF	20% 10%	25V 25V 50V 50V	C349 C350	1-128-551-11	ELECT (KV-M2170A/M2	22MF 2171A/M2170B 2170E/M2171E	20% /M2171B	50V /M2170D/ 25V
C161	1-103-021-91	(KV-M2170A/M2171A/M2170B/ M2171D/M2170E/M2171E)	M2171B		C351	1-163-017-00	CERAMIC CHIP		10%	50V
C162 C164	1-104-658-91 1-162-638-11	ELECT 47MF CERAMIC CHIP 1MF (KV-M2170A/M2171A/M2170B/ M2171D/M2170E/M2171E)	20% M2171B	16V 16V /M2170D/	C353 C355 C358 C359 C360	1-163-117-00 1-163-071-91 1-163-021-91 1-126-964-11 1-163-021-91	CERAMIC CHIP ELECT	0.01MF 0.01MF 10MF	5% 10% 20% 10%	50V 50V 100V 50V 100V
C165	1-104-658-91	ELECT 47MF	20%	16V	C401	1-103-021-91	ELECT	47MF	20%	16V
C166	1-104-658-91 1-163-009-11	ELECT 100MF (KV-M2170A/M2171A/M2170B/ M2171D/M2170E/M2171E) CERAMIC CHIP 0.001MF		10V /M2170D/	C402 C404 C405 C406	1-163-009-91 1-163-038-91 1-163-038-91 1-124-927-11	CERAMIC CHIP	0.001MF 0.1MF	10%	50V 25V 25V 50V
C168	1-163-205-00	CERAMIC CHIP 0.001MF	10%	50V	C400	1-124-927-11	ELECT	220MF	20%	25V
C200 C300 C301 C302	1-163-071-91 1-126-934-11 1-163-077-00 1-163-035-00	CERAMIC CHIP 0.01MF ELECT 220MF CERAMIC CHIP 0.1MF CERAMIC CHIP 0.047MF	10% 20% 10%	50V 16V 25V 50V	C408 C410 C412 C413	1-126-941-11 1-163-038-91 1-163-038-91 1-124-927-11	ELECT CERAMIC CHIP CERAMIC CHIP ELECT	470MF 0.1MF	20%	25V 25V 25V 25V
C304	1-163-059-91	CERAMIC CHIP 0.01MF	10%	50V	C415	1-163-009-91	CERAMIC CHIP		10%	50V
C305 C306 C307 C308 C309	1-124-925-11 1-130-494-11 1-163-038-91 1-163-021-91 1-124-927-11	ELECT 2.2MF FILM 0.082MF CERAMIC CHIP 0.1MF CERAMIC CHIP 0.01MF ELECT 4.7MF	20% 5% 10% 20%	50V 50V 25V 50V	C416 C417 C418 C500	1-163-031-91 1-163-031-91 1-163-205-00 1-130-489-00	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP FILM	0.01MF	10% 5%	50V 50V 50V 50V
C310 C312 C313 C314	1-163-077-00 1-164-004-11 1-163-145-00 1-163-077-91	CERAMIC CHIP 0.1MF CERAMIC CHIP 0.1MF CERAMIC CHIP 0.0015MF CERAMIC CHIP 0.1MF	10% 10% 5%	25V 25V 50V 50V	C501 C502 C503 C504 C505	1-124-927-11 1-163-077-91 1-126-952-11 1-124-122-11 1-126-941-11	CERAMIC CHIP ELECT ELECT	4.7MF 0.1MF 1000MF 100MF 470MF	20% 20% 20% 20%	50V 50V 35V 50V 25V
C315		CERAMIC CHIP 0.1MF		25V	C505		CERAMIC CHIP		10%	50V
C316 C317 C318 C319	1-163-038-91 1-163-038-91 1-163-038-91	CERAMIC CHIP 0.1MF CERAMIC CHIP 0.1MF CERAMIC CHIP 0.1MF CERAMIC CHIP 0.1MF		25V 25V 25V 25V	C507 C508 C509 C600	1-124-903-11 1-130-785-11 1-163-035-00 1-126-967-11	ELECT MYLAR CERAMIC CHIP	1MF 0.47MF	20% 10% 20%	50V 100V 50V 50V
C320 C321	1-163-038-91 1-124-927-11	CERAMIC CHIP 0.1MF ELECT 4.7MF	20%	25V 50V		1-136-516-12 1-136-516-12		0.1MF 0.1MP	20% 20%	300Y 300Y
C323 C324	1-163-163-91 1-163-119-00	CERAMIC CHIP 18PF CERAMIC CHIP 120PF CERAMIC CHIP 0.1MF	5% 5% 10% 10%	50V 50V 25V 25V	C603 A	1-162-599-12 1-162-599-12 1-113-473-11	CERAMIC CERAMIC	0.0047MP		3500 3500
	1-163-035-00	CERAMIC CHIP 470PF CERAMIC CHIP 0.047MF CERAMIC CHIP 0.0039MF	10% 10%	50V 50V 50V	C607 C608 C609 C610	1-104-666-11 1-126-964-11 1-109-921-11 1-104-665-11	ELECT CERAMIC	220MF 10MF 0.0015MF 100MF	20% 20% 10% 20%	25V 50V 500V 25V
C330	1-164-004-11	CERAMIC CHIP 0.1MF CERAMIC CHIP 0.1MF	10%	25V 25V	C611	1-126-964-11	ELECT	10MF	20%	50V
C333 C335 C336	1-163-033-91 1-163-021-91 1-162-638-11	CERAMIC CHIP 0.022MF CERAMIC CHIP 0.01MF CERAMIC CHIP 1MF CERAMIC CHIP 1MF	10%	50V 50V 16V 16V		1-161-742-00 1-161-742-00 1-136-538-11 1-164-232-11 1-162-116-00	CERAMIC FILM CERAMIC CHIP	0.0022MF 0.0022MF 0.001MF 0.01MF 680PF	3% 10% 10% 10%	2KV 50V 2KV
	1-128-551-11		20%	50V	C619	1-102-116-00		470PF	10%	500V



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REF.NO.	PART NO.	DESCRIPTION			REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C620 C621	1-124-347-00 1-126-942-61		OMF	20% 20%	160V 25V		< COM	NECTOR >	
C622 C625	1-111-041-51		00MF	20%	16V 25V	CN001 CN201		PIN, CONNECTOR 5P PLUG, CONNECTOR 3P	
C626	1-104-658-91		OMF	20%	16V	CN603	1-508-786-00	PIN, CONNECTOR (POPEN, CONNECTOR (5M)	M PITCH) 2P
C627 C800 C801	1-104-658-91 1-126-772-11 1-129-746-00	ELECT 1M	OMF IF O39MF	20% 20% 10%	16V 250V 400V	CN801		CONNECTOR PIN (DY)	6P
C803	1-136-109-00		68MF	5%	200V	CNA81 CNA82		PIN, CONNECTOR 6P PIN, CONNECTOR 5P	
C804 C806	1-124-902-00 1-102-244-00		47MF	20% 10%	50V 500V		< DIC	DDE >	
C807	1-107-652-11		MF	20%	250V	D001		DIODE LR5360-DG	
C808	1-136-079-00		01MF	3%	2KV	D002	8-759-157-40		
C809	1-161-754-00	CERAMIC 0.	001MF	10%	2KV	D004		DIODE RD5.1ESB2	
C810	1-129-702-00	PTIM 0	001MF	10%	400V	D005 D006		DIODE 1SS133T-77	
C811	1-102-228-00		OPF	10%	500V	סטטע	8-719-991-33	DIODE 1SS133T-77	
C815	1-162-116-00		OPF	10%	2KV	D014	8-719-991-33	DIODE 1SS133T-77	
C816	1-162-114-00		0047MF	10.0	2KV	D100	8-719-991-33		
C817	1-136-559-11	MYLAR 0.	0047MF	10%	400V	D102	8-719-903-27	DIODE 1SS168	
C818	1 126 022 11	DTTM 1M	170	E0.	10017				12170B/M2171B/M2170D/
C819	1-136-933-11 1-162-318-11		OO1MF	5% 10%	100V 500V			M2171D/M2170E/M	12171E)
C820	1-126-951-11		OMF	20%	35V	D104	8-719-903-27	DIODE 1SS168	
C822	1-104-696-11		015MF	10%	100V		0 1-5 500 21		12170B/M2171B/M2170D/
C823	1-106-375-12	MYLAR 0.	022MF	10%	250V			M2171D/M2170E/M	(2171E)
C824	1 100 207 00	MITTAD A	0.41em	4.00.	400**	D105	8-719-991-33		
C827	1-106-367-00	CERAMIC CHIP 0.	01MF	10% 10%	400V 50V			(KV-M2)	170K/M2171K/ M2171KR)
C828	1-124-903-11			20%	50V	D106	8-719-991-33	DIODE 1SS133T-77	
C829	1-163-063-91	CERAMIC CHIP 0.	022MF	10%	50V			(KV-M2	2170K/M2171K/M2171KR)
	***	men				D107	8-719-991-33		
	< F11	TER >				D109 D301	8-719-820-71 8-719-991-33	DIODE 1SV214 DIODE 1SS133T-77	
CF101	1-404-801-31	TRAP, CERAMIC				D301	0-/13-331-33	DIODE 1991331-11	
		(KV-M2170A/M2171		•		D302	8-719-991-33		
	1 400 400 44	M2171E/M217	0K/M2171K	/M21711	KR)	D305	1-247-821-91	CARBON 390	5% 1/4W
	1-409-429-11		0L/M2171L	/M21701	n /M9171m\	D307	8-719-991-33	DIODE 1SS133T-77	0170D /W0171D /W0170D /
	1-409-430-11	TRAP, CERAMIC (M2171D/M2170E/M	2170B/M2171B/M2170D/ 2171E)
CF102	1-409-327-00	TRAP, CERAMIC (6.5 MHz)			D308	8-719-991-33	DIODE 1SS133T-77	
			V-M2170K/	M2171K	/M2171KR)		0 /25 552 00		2170B/M2171B/M2170D/
CF103	1-567-100-00	FILTER, CERAMIC				D401		DIODE RD6.8ESB2	,
	1 760 106 11		0L/M2171L	/M21701	U/M2171U)	D402	8-719-109-97	DIODE RD6.8ESB2	
	1-/00-100-11	FILTER, CERAMIC (KV-M2170A/M2171		/M21711	R/W2170n/	D403	8-719-109-97	DIODE RD6.8ESB2	
		M2171D/M217		-		D404		DIODE RD6.8ESB2	
		M2171KR)			.,,	D405	8-719-109-97		
e=1						D406		DIODE RD6.8ESB2	
CF104	1-567-101-11	FILTER, CERAMIC		W01717	/wa171wn\	D407	8-719-109-97	DIODE RD6.8ESB2	
CF105	1-760-154-11	TRAP, CERAMIC	V-M2170K/	MAI/IN	(M21/INK)	D408	8-719-109-97	DIODE RD6.8ESB2	
	- /00 232 22	(KV-M2170A/M2171	1A/M2170B	/M2171	B/M2170D/	D409		DIODE 1SS133T-77	
		M2171D/M2170			,,	D410		DIODE RD6.8ESB2	
OWELL O.1						D414		DIODE 1SS133T-77	
SWF101	1-579-120-11	FILTER, SURFACE		/M21711	n/M2170#/	D501	8-719-302-43	DIODE EL1Z	
		(KV-M2170A/M2171 M2171E)	TW/ WET / AD	/ mai/ ii	D/MET/UD/	D600	8-719-991-33	DIODE 1SS133T-77	
	1-579-273-11	FILTER, SURFACE	WAVE (KV	7-M2170	B/M2171B)	D601		DIODE EM1-V1	
		FILTER, SURFACE	WAVE			D602	8-719-312-61	DIODE EU-1Z	
	4 860 844 44	•	V-M2170K/	M2171K	/M2171KR)	D603		DIODE EG-1Z-V1	
	1-760-711-11	FILTER, SURFACE (KV-M217)	: WAVE OL/M2171L	/M2170	U/M2171U)	D604	8-719-312-61		
SWF102	1 760 700 44	DIIMPR (TERRA	I WATE			D605	8-719-312-61		
DHE 102	1-/00-/22-11	FILTER, SURFACE (KV-M2170A/M2171		/M21711	R/W2170D/	D606 D607	8-719-979-85 8-719-302-43		
		M2171D/M2170			o; mat: (UD)	D608		DIODE ERA83-006	
				-		D610		DIODE GBU4JL-6088	

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for safety.

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REF.NO.	PART NO.	DESCRIPTION REMAR		REF.NO.	PART NO.	DESCRIPT	ION	REMARK
			I MARTINE TO		-			HEMISCH
D611 D801		DIODE 1SS133T-77 DIODE BYD33G		L108	1-408-405-00	INDUCTOR	4.7UH (KV-M2170K/M217	1K/M2171KR)
D802	8-719-302-43				1-408-408-00		8.2UH	
D803 D804		DIODE ERC06-15S DIODE RGP02-17EL-6433					M2171A/M2170B/M21 M2170E/M2171E/M21	
						M2170U/N		/OD/REI/ID/
D805 D806	8-719-928-08 8-719-302-43	DIODE ERD28-08S		L109	1-403-686-12	COTT		
D807		DIODE 1SS133T-77		L110	1-410-673-31	INDUCTOR	68UH	
	< FUS	E >		L111	1-410-665-41		15UH (2171A/M2170B/M21	71 R/M2170D/
DEAT				*110	1 400 447 00	M2171D/N	(2170E/M2171E)	, 15, 1111, 05,
P601 /	1-533-230-11	FUSE (H.B.C.) (A. 250 HOLDER, FUSE ; F601		L112	1-408-417-00	INDUCTOR	47UH	
		RITE BEAD >		L113	1-410-985-41			74 m /w04 F0 m /
						(KV-M217UA/I M2171D/I	M2171A/M2170B/M21 M2170E/M2171E/M21	71B/M217UD/ .70K/M2171K/
FB001 FB002		FERRITE BEAD INDUCTOR			1 016 005 00	M2171KR,	/M2170L/M2171L)	
FB002		FERRITE BEAD INDUCTOR FERRITE BEAD INDUCTOR			1-216-295-00	METAL GLAZE		10W .70U/M2171U)
FB601 FB603		FERRITE BEAD INDUCTOR FERRITE BEAD INDUCTOR		T 201	1 410 521 21	TMDMOROR	•	,
10003	1-410-39/-21	FERRITE BEAD INDUCTOR	1.108	L201 L602	1-412-531-31 1-408-609-41		33UH 33UH	
FB604 FB605		FERRITE BEAD INDUCTOR FERRITE BEAD INDUCTOR		L603	1-410-669-31		33UH	
FB801		FERRITE BEAD INDUCTOR		L604 L800	1-408-417-00 1-412-553-41		47UH 3.3MMH	
	< IC			L801	1-420-872-00	COTT 1TD COT	20	
	< 1C			L802	1-407-365-00	COIL, CHOKE	ΧĿ	
IC001	8-759-354-63	IC SAA5290ZP/006 (KV- IC SAA5290ZP/007	M2171KR)	L803 L804	1-459-390-00			
	0-735-334-04	(KV-M2171A/M2171B/M21	71D/M2171E/M2171K/	L805	1-459-105-21 1-412-531-21		33UH	
	8-759-354-82	M2171L/M2171U) IC SAA5288ZP/007		L806	1_450_652_12	COTI. HORTE	ONTAL LINEARITY	
	0 705 551 02	(KV-M2170A/M2170B/M21	70D/M2170E/M2170K/	1000			MIAD DIMBARIII	
		M2170L/M2170U)			< IC	LINK >		
IC002 IC003	8-759-280-74	IC ST24C02CB1 IC SBX1790-11			1-532-685-21			44
	0-747-303-11			2000	1-512-637-00	Little II, I.	4 (152-840)	
IC101	8-759-333-17 8-759-333-19		3/M2171B)		< TRA	NSISTOR >		
	0 707 000 17	(KV-M2170A/M2171A/M21		Q001	8-729-119-78	TRANSISTOR 2	SC2785-HFE	
		M2171B/M2170K/M21 M2170L/M2171L/M21					(2171A/M2170B/M21 (2170E/M2171E)	11B/M2170D/
	• ==		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		8-729-922-66	TRANSISTOR 2	SC2410SN	
IC301	8-759-333-44	IC MC44007P (KV-M2170A/M2171A/M21	70R/M2171R/M2170T./				12171K/M2171KR/M2 12170U/M2171U)	17 OL/
	A 550 000 45	M2171L/M2170U/M21						
	8-759-333-45	IC MC44002P (KV-M2170B/M2171B/M21	70D/M2171D/M2170K/	Q002	8-729-173-38		!SA733-K !2171A/M2170B/M21'	71 18/M2170D/
		M2171K/M2171KR)			0 500 000 44	M2171D/M	(2170E/M2171E)	
IC302	8-759-333-46	IC MC44140P			8-729-026-41		:SA933AS-QRT I2171K/M2171KR/M2:	17 O L/
IC401	8-759-041-82	IC TDA1013B HEATSINK, VR ; IC401					(2170U/M2171U)	
IC501	8-759-192-71	IC STV9379		Q005	8-729-119-78	TRANSISTOR 2	SC2785-HFE	
IC601	8-749-011-02	IC STR-S5706					12171A/M2170B/M21	11B/M2170D/
IC603	8- 7 59-337-99	IC TDA8139			8-729-920-74	TRANSISTOR 2	12170E/M2171E) SC2412K-QR	
	< 800	CKET >					12171K/M2171KR/M2: 12170U/M2171U)	17 O L/
J201				-005				
J401	1-568-267-21 1-561-534-00	JACK SOCKET 21P		Q006	8-729-173-38	TRANSISTOR 2 (KV-M2170A/M	SA733-K 2171A/M2170B/M21"	11 E3/M2170D/
					0 700 000 40	M2171D/M	(2170E/M2171E)	
	< CO1				8-729-026-41	TRANSISTOR 2 (KV-M2170K/M	SA933AS-QRT 2171K/M2171KR/M21	17 OL/
L101 L105	1-410-669-31 1-408-411-00	INDUCTOR 33UH INDUCTOR 15UH					2170U/M2171U)	
2243	± 100-411-00	TWDOCLOK TOOH		Q007	8-729-119-78			
•				Q008	8-729-119-78			



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTI	ON		REMARK
Q009	8-729-119-78	TRANSISTOR 2SC2785-HFE		Q116	8-729-900-89		(2171A)	M2170	B/M2171B/M2170D/
Q010	8-729-119-78	(KV-M2170A/M2171A/M2170B/M M2171D/M2170E/M2171E)	2171B/M2170D/	Q300 Q301	8-729-900-80 8 - 729-119-78		TC114E	S	E)
	8-729-920-74	TRANSISTOR 2SC2412K-QR (KV-M2170K/M2171K/M2171KR/ M2171L/M2170U/M2171U)	M2170L/	Q302 Q303 Q304	8-729-900-80 8-729-900-80 8-729-900-80	TRANSISTOR I	TC114E	S	
Q011	8-729-900-89	TRANSISTOR DTC144ES		Q305 Q306	8-729-900-80 8-729-900-80	TRANSISTOR I	TC114E	S	
Q012	8-729-119-78	TRANSISTOR 2SC2785-HFE (KV-M2170A/M2171A/M2170B/M M2171D/M2170E/M2171E)	2171B/M2170D/	Q307	8-729-119-76	TRANSISTOR 2	SA1175	-HFE	B/M2171B/M2170D/
	8-729-920-74	TRANSISTOR 2SC2412K-QR (KV-M2170K/M2171K/M2171KR/ M2171L/M2170U/M2171U)	M2170L/	Q308 Q401	8-729-901-01 8-729-119-78	M2171D/N TRANSISTOR I	2170E/ TC144E	M21711 K	
Q013	8-729-119-78	TRANSISTOR 2SC2785-HFE (KV-M2170A/M2171A/M2170B/M M2171D/M2170E/M2171E)	2171B/M2170D/	Q402	8-729-173-38	TRANSISTOR 2 (KV-M2170A/M M2171D/M	2171A/	M2170E	3/M2171B/M2170D/
	8-729-920-74		M2170L/		8-729-216-22		SA1162 2171K/	-G M2171	KR/M2170L/
Q014	8-729-119-78	TRANSISTOR 2SC2785-HFE (KV-M2170A/M2171A/M2170B/M M2171D/M2170E/M2171E)	2171B/M2170D/	Q403	8-729-119-78		2171A/	M2170E	3/M2171B/M2170D/
	8-729-920-74	TRANSISTOR 2SC2412K-OR (KV-M2170K/M2171K/M2171KR/ M2171L/M2170U/M2171U)	M2170L/		8-729-920-74		SC2412 2171K/	K-QR M217 1 K	R/M2170L/
Q015	8-729-119-78	TRANSISTOR 2SC2785-HFE (KV-M2170A/M2171A/M2170B/M M2171D/M2170E/M2171E)	2171B/M2170D/	Q404	8-729-119-78	TRANSISTOR 2 (KV-M2170A/M M2171D/M	2171A/	M21703	/M2171B/M2170D/
	8-729-920-74		M2170L/		8-729-920-74	TRANSISTOR 2 (KV-M2170K/M M2171L/M	SC2412 2171K/	K-QR M2171k	R/M2170L/
Q016 Q100	8-729-216-22 8-729-901-01			Q600 Q602	8-729-119-78 8-729-900-65				
Q101	8-729-900-80	TRANSISTOR DTC114ES (KV-M2170A/M2171A/M2170B/M M2171D/M2170E/M2171E)	2171B/M2170D/	Q801 Q802 Q803	8-729-140-96 8-729-033-85 8-729-900-89	TRANSISTOR S	2000N-	16E305	A
Q102	8-729-900-80	TRANSISTOR DTC114ES (KV-M2170A/M2171A/M2170B/M M2171D/M2170E/M2171E)	2171B/M2170D/	Q804 Q805	8-729-202-03 8-729-140-96	TRANSISTOR 2 TRANSISTOR 2	SD1408 SD774-	-Y 34	
Q103	8-729-900-80	TRANSISTOR DTC114ES (KV-M2170A/M2171A/M2170B/M	2171B/M2170D/		< RES	ISTOR >			
0105		M2171D/M2170E/M2171E)		JR004 JR007	1-216-296-91 1-216-295-00	METAL GLAZE	0	5% 5%	1 /8W 1 /10W
Q105 Q107	8-729-119-78			JR008 JR009	1-216-295-00 1-216-295-00	METAL GLAZE	0	5% 5%	1/10W 1/10W
Q109	8-729-022-54	TRANSISTOR 2SC3779C,D-AA (KV-M2170A/M2171A/M2170B/M M2171D/M2170E/M2171E)	2171B/M2170D/	JR012 JR013	1-216-295-00 1-216-295-00	METAL GLAZE METAL GLAZE	0	5% 5%	1 /10W 1 /10W
Q110	8-729-901-01	TRANSISTOR DTC144EK		JR014 JR015	1-216-296-91 1-216-295-00		0	5% 5%	1/8W 1/10W
Q111	8-729-900-89	TRANSISTOR DTC144ES (KV-M2170K/M21	71K/M2171KR)	JR017 JR018	1-216-295-00 1-216-296-91		0	5% 5%	1/10W 1/8W
Q112 Q113	8-729-119-78 8-729-900-89	TRANSISTOR DTC144ES	74 <i>m /W</i> 0454mp\	JR019	1-216-296-91	METAL GLAZE	0	5%	1/8W
0114		(KV-M2170K/M21	/IK/MZ1/IKK)	JR020 JR021	1-216-296-91	METAL GLAZE	0	5% 5%	1/10W 1/8W
Q114 Q115	8-729-901-01 8-729-173-38	TRANSISTOR 2SA9733-K (KV-M2170A/M2171A/M2170B/M	2171B/M2170D/	JR026 JR027	1-216-296-91 1-216-296-91	METAL GLAZE	0	5% 5%	1/8W 1/8W
		M2171D/M2170E/M2171E)		R001 R002	1-216-222-91 1-216-057-91		10K 2.2K	5% 5%	1_/8W 1_/10W
	٠			R004 R005	1-216-238-00 1-216-081-00		47K 22K	5% 5%	1/8W 1/10W

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REF.NO.	PART NO.	DESCRIPTION		REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK	
R006	1-216-089-00	METAL GLAZE	47K 5%	1/10W	R088	1-216-061-91	METAL GLAZE	3.3K 5%	1/10W
R008 R009 R010 R011 R012	1-216-031-91 1-216-049-91 1-216-041-00 1-216-049-91 1-216-089-00	METAL GLAZE METAL GLAZE METAL GLAZE	180 5% 1K 5% 470 5% 1K 5% 47K 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R089 R090 R091 R093 R094	1-216-061-91 1-216-061-91 1-249-427-11 1-216-065-00 1-216-081-00	METAL GLAZE CARBON METAL GLAZE	3.3K 5% 3.3K 5% 6.8K 5% 4.7K 5% 22K 5%	1/10W 1/10W 1/4W 1/10W 1/10W
R013 R014 R015 R016 R017	1-216-049-91 1-216-065-00 1-216-065-00 1-216-025-91 1-216-025-91	METAL GLAZE METAL GLAZE METAL GLAZE	1K 5% 4.7K 5% 4.7K 5% 100 5% 100 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R095 R096 R097 R098 R099	1-216-081-00 1-216-033-00 1-216-051-91 1-216-051-91 1-216-200-91	METAL GLAZE	22K 5% 220 5% 1.2K 5% 1.2K 5% 1.2K 5%	1/10W 1/10W 1/10W 1/10W 1/8W
R018 R019 R020 R021 R022	1-216-081-00 1-216-174-91 1-216-089-91 1-216-174-91 1-216-295-00	METAL GLAZE METAL GLAZE	22K 5% 100 5% 47K 5% 100 5% 0 5%	1/10W 1/8W 1/10W 1/8W 1/10W	R102 R104	1-216-234-91 1-216-059-91	METAL GLAZE (KV-M2170A/M: M2171D/M:	2170E/M2171E	
R024 R025 R026 R027	1-216-089-00 1-216-222-91 1-216-081-00 1-216-206-00	METAL GLAZE METAL GLAZE	47K 5% 10K 5% 22K 5% 2.2K 5%	1/10W 1/8W 1/10W 1/8W	R105	1-216-025-91	(KV-M2170A/M: M2171D/M: METAL GLAZE (KV-M2170A/M:	2170E/M2171E 1.5K 5% 2171A/M2170B	1/10W /M2171B/M2170D/
R028 R029 R030 R031	1-216-081-00 1-216-081-00 1-215-900-11 1-216-065-00	METAL GLAZE METAL OXIDE METAL GLAZE	22K 5% 22K 5% 22K 5% 4.7K 5% 1K 5%	1/10W 1/10W 2W F 1/10W	R107	1-216-017-91	METAL GLAZE (KV-M2170A/M	2170E/M2171E 47 5% 2171A/M2170B 2170E/M2171E 5.6K 5%	1/10W /M2171B/M2170D/
R032 R033 R034 R035	1-216-049-91 1-216-049-91 1-247-855-91 1-247-863-91	METAL GLAZE CARBON	1K 5% 1K 5% 10K 5% 22K 5%	1/10W 1/10W 1/4W 1/4W	R109	1-216-067-00	METAL GLAZE (KV-M2170A/M	100 5%	1/10W 1/10W /M2171B/M2170D/
R036 R037 R039	1-216-059-91 1-216-057-91 1-216-089-00	METAL GLAZE METAL GLAZE	2.7K 5% 2.2K 5 47K 5% 4.7K 5%	% 1/10W 1/10W	R110 R111 R112	1-216-101-00 1-216-085-00 1-216-057-91		150K 5% 33K 5% 2.2K 5%	1/10W 1/10W 1/10W 1/10W /M2171B/M2170D/
R042 R044 R045 R046	1-216-065-00 1-216-230-00 1-216-073-00 1-216-081-00 1-216-105-91	METAL GLAZE METAL GLAZE METAL GLAZE	22K 5% 10K 5% 22K 5% 22K 5% 220K 5%	1/8W 1/10W 1/10W	R113	1-216-057-91	M2171D/M2 METAL GLAZE (KV-M2170A/M2	2170E/M2171E 2.2K 5%	1/1 0 W /M217 1 B/M2170D/
R047 R049 R052 R055 R060	1-216-077-00 1-216-041-00 1-216-238-91 1-216-057-91 1-216-061-00	METAL GLAZE METAL GLAZE METAL GLAZE	15K 5% 470 5% 47K 5% 2.2K 5% 3.3K 5%	1/10W 1/8W 1/10W	R114 R115	1-216-073-00 1-216-057-91	(KV-M2170A/M2 M2171D/M2 METAL GLAZE	2170E/M2171E 2.2K 5%	1/1 O W /M217 1 B/M2170D/) 1/1 O W /M217 1 B/M2170D/
R061 R062 R063 R064	1-216-073-00 1-216-073-00 1-216-061-00 1-216-073-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	10K 5% 10K 5% 3.3K 5% 10K 5%	1/10W 1/10W 1/10W 1/10W	R116 R117 R118	1-216-049-91 1-216-089-00 1-216-075-00	M2171D/M2 METAL GLAZE METAL GLAZE	2170E/M2171E 1K 5% 47K 5% 12K 5%	
R065 R066 R067 R068 R069	1-247-863-91	METAL GLAZE METAL GLAZE METAL GLAZE CARBON	10K 5% 10K 5% 22K 5% 10K 5% 22K 5%	1/10W 1/10W 1/10W 1/4W	R122	1-216-025-91 1-216-029-00	METAL GLAZE (KV-M2170A/M	150 5% 2171A/M2170B	1/1OW 1/10W 1/1OW /M2171B/M2170D/ /M2170L/M2171L/
R070 R071 R072 R073 R074 R075	1-216-065-00 1-216-081-00 1-216-230-00 1-216-089-00 1-216-073-00 1-249-436-11	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	4.7K 5% 22K 5% 22K 5% 47K 5% 10K 5% 39K 5%	1/10W 1/8W 1/10W 1/10W	R123 R124 R125 R126 R127	1-216-089-00 1-216-025-91 1-216-025-91 1-216-025-91 1-216-180-00	METAL GLAZE METAL GLAZE METAL GLAZE	2171U) 47K 5% 100 5% 100 5% 100 5% 180 5%	1/10W 1/10W 1/10W 1/10W 1/3W
R078 R079 R080 R081	1-216-071-91 1-216-061-00	METAL GLAZE METAL GLAZE METAL GLAZE	8.2K 5% 3.3K 5% 2.2K 5% 56K 5%	1/10W 1/10W 1/10W	R128 R133	1-216-073-00 1-249-429-11	METAL GLAZE	10K 5% 10K 5%	1/10W 1/4W



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	N		REMARK
R134	1-216-029-00		1/10W .L/M2170U/M2171U)	R178 R179	1-216-055-0		1.8K		10W
	1-216-031-91		1/10W	R180	1-216-212-9	1 METAL GLAZE	3.9K		8W
		M2171D/M2170E/M2171 M1441KR)	E/M1440K/M1441K/			(KV-M2170A/M M2171D/M	2170E/M2	2170B/M21 2171E)	
R136	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W	R205 R301	1-247-741-1: 1-216-073-0		150	5% 1/2	
R137	1-216-109-00	METAL GLAZE 330K 5%	1/10W	KJUI	1-210-0/3-00) METAL GLAZE	10K	5% 1/:	10W
R138 R141	1-216-081-00	METAL GLAZE 22K 5%	1/10W	R302	1-216-037-91		330	5% 1/1	10W
R141	1-216-057-91	METAL GLAZE 2.2K 5% METAL GLAZE 2.2K 5%	1/10W	R303	1-216-090-00	METAL GLAZE	51K		10W
-14-2-	1 110 037 71	MAIRH GUADE 2.28 36	1/10W	R304 R305	1-216-025-91	METAL GLAZE	100		10W
R143	1-216-295-00	(KV-M2170A/M2171A/M2170	1/10W B/M2171B/M2170D/	R306		METAL GLAZE METAL GLAZE	100 470k	5% 1/1 5% 1/1	10W 10W
		M2171D/M2170E/M2171	E/M2170L/M2171L/	R307	1-216-121-91	METAL GLAZE	1M	5% 1/1	l nw
		M2170U/M2171U)		R308	1-216-234-91	METAL GLAZE		5% 1/8	
R144	1-216-206-00	METAL GLAZE 2.2K 5%	1/8W	R309	1-216-121-91	METAL GLAZE		5% 1/1	LOM
	1 210 200 00		/M2171K/M2171KR)	R310 R311	1-216-089-00			5% 1/1	
R145	1-216-206-00	METAL GLAZE 2.2K 5%	1/8W /M2171K/M2171KR)	R312	1-216-093-00 1-216-089-00			5% 1/1	
R146	1-216-043-91	METAL GLAZE 560 5%	1/10W	R312	1-216-045-00			5% 1/1 5% 1/1	
24.42	4 444 444 44			R314	1-216-045-00			5% 1/1 5% 1/1	
R147	1-216-043-91		1/10W	R315	1-216-045-00			5% 1/1	
R149	1-216-057-91	METAL GLAZE 2.2K 5%	/M2171K/M2171KR) 1/10W	R316	1-216-033-00	METAL GLAZE		5% 1/1	
R151	1-216-097-00	METAL GLAZE 100K 5%	/M2171K/M2171KR) 1/10W	R317	1-216-182-00			5% 1/8	
	- 220 057 00	METHO CHARLE IVVE 3%	1/10M	R318 R322	1-216-019-91 1-216-022-91			5% 1/1	
R153		METAL GLAZE 100K 5%	1/10W	R323	1-216-022-91			5% 1/1 5% 1/1	
R154	1-216-081-00		1/10W	R325	1-216-089-00			5% 1/10	
R155 R157	1-216-081-00 1-216-049-91		1/10W				-/	20 2/1	011
1127	1-210-049-31	METAL GLAZE 1K 5% (KV-M2170A/M2171A/M2170E	1/10W	R326	1-216-115-91	METAL GLAZE		5% 1/10	0W
		M2171D/M2170E/M2171E	7) M41/1D/M41/UD/	R327 R333	1-216-097-91	METAL GLAZE		5% 1/10	
			• /	R334	1-216-037-91 1-216-033-00			5% 1 /10	
R158	1-216-031-91	(KV-M2170A/M2171A/M2170E	1/10W B/M2171B/M2170D/	R335	1-216-295-00			5% 1/10 5% 1/10	
	1 016 020 00	M2171D/M2170E/M2171E	1)	R336	1-216-296-91	METAL GLAZE	0 5	5% 1/8¥	а
	1-216-039-00	METAL GLAZE 390 5%	1/10W	R337	1-216-295-00	METAL GLAZE		% 1/10W	•
		(KV-M2170K/M2171K/M2171K M2171L/M2170U/M2171U		R339	1-216-061-00		3.3K 5	% 1/10)W
		M21/11/M21/00/M21/10	1	R340 R341	1-216-121-91	METAL GLAZE		% 1/10	
R159	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W	VATI	1-216-075-00	METAL GLAZE	12K 5	% 1/10	IW
R160	1-216-238-91		1/8W	R342	1-216-186-91	METAL GLAZE	330 5	% 1/8W	ī
R161	1-216-295-00	METAL GLAZE 0 5%	1/10W	R343	1-216-295-00	METAL GLAZE	0 5		
		(KV-M2170A/M2171A/M2170D M2171E/M2170K/M2171K	/M2171D/M2170E/	R344	1-216-295-00	METAL GLAZE	0 5		
		M2170L/M2171L/M2170U	/M2171KR/ /M2171U)	R345	1-216-089-00		47K 5		
R162	1-216-017-91	METAL GLAZE 47 5%	1/10W	R347	1-216-041-00		470 59	% 1/10	
		(KV-M2170A/M2171A/M2170B	/M2171B/M2170D/			(KV-M2170A/M21 M2171D/M21	/ LA/M21/ 7017/M21'	/UB/M2111. 71@\	B/M2170D/
R163	1 040 407 44	M2171D/M2170E/M2171E	,	R348	1-216-073-00		10K 59		W
R167	1-249-407-11 1-216-246-91		1/4W 1/8W			(KV-M2170A/M21 M2171D/M21	71A/M217	70B/M21 711	B/M2170D/
R168	1-249-407-11	CARBON 150 5%	1/4W	7240					
R169	1-216-073-00	METAL GLAZE 10K 5%	1/10W	R349	1-216-105-91	(KV-M2170A/M21	220K 5% 71A/M217	0B/121 71E	W 8/M2170D/
		(KV-M2170A/M2171A/M2170B, M2171D/M2170E/M2171E)	/ W71/1R/W31/OD/	DOEA	1 016 022 02	M2171D/M21	70E/M217	1E)	
		MAI, ID, MAI, VE, MAI, IE,	1	R350	1-216-033-00	METAL GLAZE	220 5%	s 1/10	Ň
R170	1-216-063-91	METAL GLAZE 3.9K 5% (KV-M2170A/M2171A/M2170B)	1/10W /M2171B/M2170D/			(KV-M2170A/M217 M2171D/M217			3/M2170 D /
R171	4 044 05	M2171D/M2170E/M2171E)		R351	1-216-292-11	METAL GLAZE	8.2M 5%	1/8W	
WT / T	1-216-069-00	METAL GLAZE 6.8K 5%	1/10W	R352	1-216-262-91	METAL GLAZE	470K 5%		
		(KV-M2170A/M2171A/M2170B/ M2171D/M2170E/M2171E)	MZ171B/M2170D/	R353	1-247-804-11	CARBON	75 5%	1/4W	
				R354 R355	1-216-025-91	METAL GLAZE 1	100 5%		
R175	1-216-049-91	METAL GLAZE 1K 5%	1/10W	7.223	1-216-121-91	METAL GLAZE	LM 5%	1/10W	1
R176 R177	1-216-049-91	METAL GLAZE 1K 5%	1/10W	R356	1-216-121-91	METAL GLAZE 1	LM 5%	1/ 1 0W	7
	1-216-049-91	METAL GLAZE 1K 5%	1/10W	R357	1-216-095-00	METAL GLAZE 8	32K 5%		

The components identified by shading and marked 🗥 are critical for safety.
Replace only with the part number

specified.

Les composants identifies par une trame et une marque 🔥 sont critiques pour la securite.

Ne les remplacer que par une piece portant le numero specifie.



REF.NO.	PART NO.	DESCRIPTION		REMARK	REF.NO.	PART NO.	DESCRIPTIO	DN	REMARK
R358 R359 R361	1-216-009-91 1-216-089-00 1-216-022-91	METAL GLAZE 47	K 5%	1/10W 1/10W 1/10W	R804 R806 R807	1-217-778-11 1-216-349-00 1-247-795-91	METAL OXIDE	1K 5% 1 5% 33 5%	1W F 1W F 1/10W
R362 R363 R401 R402 R403	1-216-022-91 1-216-022-91 1-216-041-00 1-249-431-11 1-249-431-11	METAL GLAZE 75 METAL GLAZE 47 CARBON 15	5% 0 5% K 5%	1/10W 1/10W 1/10W 1/4W 1/4W	R809 R810 R811 R812 R814	1-215-916-51 1-247-895-91 1-215-869-11 1-215-869-11 1-217-811-11	CARBON METAL OXIDE METAL OXIDE	680 5% 470K 5% 1K 5% 1K 5% 0.47 5%	3W F 1/4W 1W F 1W F 1/4W
R405 R406 R407 R408	1-249-389-11 1-216-091-00 1-216-041-00 1-216-033-00	METAL GLAZE 56 METAL GLAZE 47 METAL GLAZE 22	K 5% 0 5%	1/4W F 1/10W 1/10W 1/10W	R815 R816 R817 R818 R819	1-216-101-00 1-216-369-00 1-216-447-00 1-202-830-00 1-249-441-11	METAL OXIDE METAL OXIDE SOLID	150K 5% 1 5% 27 5% 10K 10% 100K 5%	1/10W 2W F 2W F 1/2W 1/4W
R410	1-247-804-11	(KV-M2170A/M2171 M2171D/M2170 M2171KR) METAL GLAZE 68	A/M2170B/ E/M2171E/ 5%	'M2170K/M2171K/ 1/4W	R820 R822 R823 R824	1-249-935-11 1-216-101-00 1-216-232-91 1-216-125-00	METAL GLAZE METAL GLAZE METAL GLAZE	3.3K 5% 150K 5% 470 5% 1.5M 5%	1/4W F 1/10W 1/8W 1/10W
R411	1-216-085-00	METAL GLAZE 33	K 5%	/M2170U/M2171U)	R825 R828	1-216-105-91 1-247-899-11		220K 5% 680K 5%	1/10W 1/4W
R412 R413 R414	1-216-105-91 1-216-097-00 1-216-097-00	METAL GLAZE 10	OK 5% OK 5% OK 5%	1/10W 1/10W 1/10W		< VAF	HABLE RESISTOR	>	
R415 R416	1-216-222-91	METAL GLAZE 10	K 5%	1/10W 1/8W	RV102	1-241-765-11		171A/M2170B/	M2171B/M2170D/
R501 R502 R503	1-216-681-00 1-208-806-11 1-216-677-11 1-216-081-00	METAL CHIP 10 METAL CHIP 12	K 0.509	1/10W 8 1/10W 8 1/10W 1/10W	RV801		RES, ADJ, CAR	170E/M2171E) BON 10K	
R504	1-216-095-00			1/10W	S001	1-571-532-21	SWITCH, TACTI	L	
R505 R507 R508 R509 R600	1-216-075-00 1-216-350-11 1-215-865-11 1-249-383-11 1-216-365-00	METAL OXIDE 1. METAL OXIDE 22 CARBON 1.	2 5% 0 5% 5 5%	1/10W 1W F 1W F 1/4W F 2W F	S002 S003 S004 S005	1-571-532-21 1-571-532-21	SWITCH, TACTI SWITCH, TACTI SWITCH, TACTI SWITCH, TACTI	L L	
RÓCL:		WIREWOOND 1.	3 5%		S006 S601	1-571-532-21 1-571-433-21	SWITCH, TACTI	L (AC POWER)	· · · · · · · · · · · · · · · · · · ·
R603 R604 R606 R607	1-215-858-51 1-215-927-00 1-249-441-11 1-216-366-51	METAL OXIDE 47 CARBON 10	K 5% OK 5%	1W F 3W F 1/4W 2W F	T601 A	< TRA	NSFORMER >	LINE PLUTER	215 291
R608 R609	1-216-647-11 1-215-859-00	METAL OXIDE 22	5%	% 1/10W 1W F	T801	1-429-207-11 1-437-090-00	HDT	E.M. C. M.	- TOTAL CARE & MANUAL CONTRACTOR
R610 R611	1-249-419-11 1-215-430-00		5K 5% 4K 1%	1/4W 1/4W	T802 A	1-453-199-11	TRANSFORMER A	SSY, FLYBACK	(N2-1741/EZE)
		METAL B.			THP601 1	1-808-059-31		OSITIVE)	
R615 R617 R618	1-217-371-00 1-216-659-11 1-216-659-11	FUSIBLE 0. METAL CHIP 2.		1/4W F 6 1/10W		< TUN			1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
R620 R621	1-215-479-00	METAL 27	0K 1%	1/4W	TU101	1-693-303-11 1-693-331-00	TUNER (TELE1X)	01)	
R622 R623 R624	1-249-429-11 1-247-895-91 1-216-081-00 1-216-033-00	METAL GLAZE 47 METAL GLAZE 22	0K 5% K 5%	1/4W 1/4W 1/10W 1/10W			M2171E/M21	171B/M2170D/1 170K/M2171K/1 171L/M2170U/1	
R625	1-216-073-00	METAL GLAZE 10	K 5%	1/10W			STAL >		
R626 R627 R630 R800 R801	1-216-089-00 1-216-346-00 1-249-401-11 1-215-887-00 1-247-891-00	METAL OXIDE 0. CARBON 47 METAL OXIDE 15	56 5% 5%	1/10W 1W F 1/4W 2W F 1/4W	X001 X302		VIBRATOR, CRYS VIBRATOR, CRYS (KV-M2170K/M21 M2171L/M21	STAL	/M217 O L/
R802 R803	1-247-807-31 1-216-081-00			1/4W 1/10W					



Q701

Q702 Q703

Q704

Q705

Q706

Q707

Q708 Q709 8-729-119-78 TRANSISTOR 2SC2785-HFE 8-729-119-78 TRANSISTOR 2SC2785-HFE

8-729-119-78 TRANSISTOR 2SC2785-HFE

8-729-906-70 TRANSISTOR BF871-127

8-729-906-70 TRANSISTOR BF871-127

8-729-906-70 TRANSISTOR BF871-127

8-729-200-17 TRANSISTOR 2SA1091-0 8-729-200-17 TRANSISTOR 2SA1091-0

8-729-200-17 TRANSISTOR 2SA1091-0

Replace only with the part number specified.

Les composants identifies par une trame et une marque 🖄 sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

							portantio		о орсс	mio.	
PART NO.	DESCRIPTION		F	REMARK	REF.NO.	PART NO.	DESCRIPTION	1		Ę	REMARK
*A-1638-074-A	C BOARD, COMP	**** M2	170B/M2	2171B/		< RES	ISTOR >				
					R701			1K	5%	1/4W	
** 1000 000 *	G DALDD G0100	M2	170E/M2	2171E)		1-249-417-11	CARBON		5%	1/4W	
A-1038-068-A	C BUARD, COMP	LETE (KV-M2	170K/M2	(171K/						1/4W	
		112				1-247-791-91	CARBON		-		
				11/00/	K/U/	1-24/-/91-91	CARBON	22	5%	1/4W	
					R708			220	5%	1/4W	
< CAPA	ACITOR >					1-247-815-91	CARBON		5%	1/4W	
1_102_117_00	CEDANTO	92000	1.00	E 017		1-247-815-91	CARBON				
1-102-117-00						1-249-417-11	CARBON				
) Ш /	K/14	1-249-41/-11	CARBON	TK	5%	1/4W	
1-102-117-00			10%	50V	R715	1-249-417-11	CARBON	1K	5%	1/4W	
				L/	R716	1-249-417-11	CARBON	1K	5%		
	M2171L/M2	170U/M2171U	1)		R717	1-247-758-11	CARBON				
					R718	1-247-758-11	CARBON	3.3K	5%		
1-102-117-00					R719	1-247-758-11	CARBON	3.3K	5%	1/2W	
				ш/	B720	1 216 407 11	WEMAT OUTEN	100	F0.	2	_
1-102-824-00				50V							F
											F
	02102120	27022	3.0	301	1						F
1-102-824-00	CERAMIC	470PF	5%	50V							
1-136-189-00					11/113	1 202 040-00	30111	4/01	100	1/4W	
1-162-114-00	CERAMIC				R726	1-202-844-00	SOLTD	330K	10%	1/2W	
1-104-660-91	ELECT	47MF	20%	16V	R727						
					R729			0.82	5%		F
< CONN	IECTOR >				R734			220	5%	1/4W	
*1_560_001_51	DIN COMMECTO	ת את			R735	1-247-815-91	CARBON	220	5%	1/4W	
					D726	1 047 015 01	as near	000		4 / 4**	
		K JF				1-24/-815-91	CARBON				
1-695-915-11	TAB (CONTACT)					1-247-756-11	CARBON				
					R746						
< DIOD)E >					****					
8-719-991-33	DIODE 1SS133T-	-77				< VARI.	ABLE RESISTOR	>			
					RV701	1-230-641-11	RES. ADJ. MET	AL GLA	ZE 2.21	WT	
					RV702	1-241-656-21	RES, ADJ, MET	AL FIL	M 110M	-	
8-719-991-33	DIODE 1SS133T-	-77			******	******	*******	*****	*****	r *****	*****
8-719-991-33	DIODE 1SS133T-	-77									
8-719-991-33	DIODE 1SS133T-	-77									
8-719-991-33	DIODE 1SS133T-	-77									
8-719-054-81	DIODE 188292										
		-77									
		-77									
< CRT	SOCKET >										
1-526-990-21	SOCKET, CRU										
< TRAN	SISTOR >										
ANAMA	*A-1638-074-A *A-1638-068-A < CAPP 1-102-117-00 1-102-117-00 1-102-824-00 1-102-824-00 1-102-824-00 1-104-660-91 < COND *1-568-881-51 *1-568-880-51 1-695-915-11 -695-915-11 -695-915-11 -695-915-11 -695-915-11 -695-915-13 8-719-991-33 8-719-054-81 8-719-991-33 8-719-054-81 < CRT	*A-1638-074-A C BOARD, COMP ************************************	*A-1638-074-A C BOARD, COMPLETE (KV-MZ ************************************	*A-1638-074-A C BOARD, COMPLETE (KV-M2170B/M M2170B/M M2171B/M M2171D/M M2171L/M2 M2 M	*A-1638-074-A C BOARD, COMPLETE (KV-M2170A/M2171B/M2170B/M2171B/M2170D/M2171D/M2170D/M2171D/M2170D/M2171D/M2170D/M2171D/M2170D/M2171L/M2170D/M2171D/M217D/M2171D/M2171D/M2171D/M2171D/M2171D/M2171D/M2171D/M2171D/M217D/M2171D/M2171D/M2171D/M2171D/M2171D/M2171D/M2171D/M2171D/M2171D/M2171D/M2171D/M217D/M2171D/M2171D/M2171D/M217D/M2171D/M217	*A-1638-074-A C BOARD, COMPLETE (KV-M2170A/M2171B/M2170B/M2171B) *M2170B/M2171B/M2170D/M2171D/M217D/M217D/M217D/M217D/M217D/M217	*A-1638-074-A C BOARD, COMPLETE (KV-M2170A/M2171B/M2171B/M2171B/M2171B/M2171B/M2171B/M2170B/M2171B/M2170B/M2171B/M2170B/M2171B/M2170B/M2171B/M2170B/M2171B/M2170B/M2171B/M2170B/M2171B/M2170B/M2171B/M2170B/M2171B/M2170B/M2171B/M2170B/M2171B/M2170B/M2171B/M2171B/M2170B/M2171B/M2171B/M2170B/M2171B/M2171B/M2170B/M2171B/M2171B/M2170B/M2171B/M2171B/M2170B/M2171B/M2171B/M2170B/M2171B/M2171B/M2170B/M2171B/M2171B/M2170B/M2171B/M2171B/M2170B/M2171B/M2171B/M2170B/M2171B/M2171B/M2170B/M2171B/M2171B/M2170B/M2171B/M2170B/M2171B/M2171B/M2170B/M2171B/M2171B/M2170B/M2171B/M2170B/M2171B/M2170B/M2171B/M2170B/M2171B/M2170B/M2171B/M2170B/M2171B/M2170B/M2171B/M2170B/M2171B/M2170B/M2170B/M2171B/M2170B/M2170B/M2171B/M2170B/M	PART NO. DESCRIPTION REMARK *A-1638-074-A C BOARD, COMPLETE (KV-M2170A/M21711A/M2170B/M21711A/M2170B/M21711B/M2170B/M2171B/M2170B/M2171B/M2170B/M2171B/M2170B/M2171B/M2170B/M2171B/M2170B/M2171B/M2170B/M2171B/M2170B/M2171B/M2170B/M2171B/M2170B/M2171B/M2170B/M2171B/M2170B/M2171B/M2170B/M2171B/M2170B/M2171B/M2170B/M2171D/M2171B/M2170B/M2171D/M2171B/M2170B/M2171D/M2170B/M2171B/M2170B/M2170B/M2171B/M2170B/M217	PART NO. DESCRIPTION REMARK *A-1638-074-A C BOARD, COMPLETE (KV-M2170R/M21711A) *M2170B/M2171B/ M2170B/M2171B/ M2170B/M2171B/ M2170B/M2171B/ M2170B/M2171B/ M2170B/M2171B/ M2170B/M2171B/ M2170B/M2171B/ M2170B/M2171B/ M2171D/M2171B/ M2171D/M2171B/M2171B/ M2171D/M2171B/M2171B/ M2171D/M2171B/M2171B/M2170B/ M2171D/M2171B/M2171B/M2171B/M2170B/ M2171D/M2171B/M2171B/M2170B/ M2171D/M2171B/M2171B/M2170B/ M2171D/M2171B/M2171B/M2171B/M2170B/ M2171D/M2171B/M2171B/M2171B/M2170B/ M2171D/M2171B/M2171B/M2171B/M2170B/ M2171D/M2171B/M2171B/M2171B/M2171B/M2170B/ M2171D/M2171B/M217B/M217B/M217B/M217	PART NO. DESCRIPTION REMARK **A-1638-074-A** C BOARD, COMPLETE (KY-M2170A/M21711A/ **M2170B/M21711B/ **M2170B/M2171B/ **M2171LM2170U/ **M2171LM2170U/M2171ER/ **M2170LM2171ER/ **M2170LM	PART NO. DESCRIPTION REMARK 7.4-1638-074-A C BOARD, COMPLETE (KV-M2170A/M2171L) 7.4-1638-068-A C BOARD, COMPLETE (KV-M2170A/M2171L) 7.4-107-107-00 CERMIC 820PF 10% 50V R715 1-249-417-11 CARBON 1K 5% 1/4W R711-1/A2171L/M2

The components identified by shading and marked $\mathcal{L}_{\mathcal{L}}$ are critical for safety.

Replace only with the part number specified.

Les composants identifies par une trame et une marque A sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

PART NO. REF.NO. DESCRIPTION REMARK REF.NO. PART NO. DESCRIPTION REMARK MISCRLLANEOUS ACCESSORIES AND PACKING MATERIALS 1-452-032-00 MAGNET, DISK; 10MM Ø 1-452-094-00 MAGNET, ROTATABLE DISK; 15MM Ø 1-452-277-00 MAGNET, BMC 4-203-127-41 MANUAL, INSTRUCTION (KV-M2170A/M2171A) (ITALIAN) 4-203-127-51 MANUAL, INSTRUCTION (KV-M2170B/M2171B) 4 1-453-199-11 TRANSFORMER ASSY, PLYBACK (NX-1741/UZR) (FRENCH/GERMAN/ITALIAN) A 1+460-090-21 COIL; DEGAUSSING (KV-M2170A/M2170B/M2171D/M2170E/M2171E/ M2170K/M2171K/M2171KR/M2170L/; M2171L/M3170U/M2171D) & 1-426-145-00 COIL, DEGAUSSING (KV-M2171A/M2171B/M2170D) 4-203-127-11 MANUAL, INSTRUCTION (KV-M2170D/M2171D) (ENGLISH/GERMAN/DUTCH/ITALIAN/FINNISH) 4-203-130-11 MANUAL, INSTRUCTION (KV-M2170D/M2171D) (GERMAN) 4-203-127-71 MANUAL, INSTRUCTION (KV-M2170E/M2171E) (SPANISH) 1-503-258-21 SPEAKER 4-203-127-81 MANUAL, INSTRUCTION (KV-M2170E/M2171E) (PORTUGUESE) * 1-540-006-12 CAP ASSY, HIGH-VOLTAGE (KV-H2170A/H2171A/H2170B/H2171B/H2170D/ M2171D/H2170P/H2171B) 4, 1-540-007-11 CAP ASSY, HIGH-VOLTAGE (KV-H2170K/H2171K/H2171KR/H2170L/ M2171L/H2170D/H2171B) 4-203-122-91 MANUAL, INSTRUCTION (KV-M2170K/M2171K) (ENGLISH/RUSSIAN/CZECH/HUNGARIAN/ POLISH/BULGARIAN) 4-203-154-91 MANUAL, INSTRUCTION (KV-M2171KR) (BULGARIAN/ENGLISH/RUSSIAN) f 1-571-433-21 SWITCH, PUSH (AC POWER) f 1-690-270-21 CORD, POWER (WITH CONNECTOR) 2.5A/250V (KV-M2170A/M2171A/M2170B/M2171B/M2170B/ M2171B/M2170B/M2171B) 4-203-122-61 MANUAL, INSTRUCTION (KV-M2170L/M2171L/M2170U/M2171U) (ENGLISH) *4-203-124-01 INDIVIDUAL CARTON (KV-M2170A/M2170K/M2171K/M2171KR/ f. 1-590-460-11 CORD, POWER (WITH CONNECTOR) 7.0A/250V (KV-M2170K/M2171K/M2171RR) f. 1-590-762-11 CORD, POWER (WITH PLUG) 2.5A/250V (KV-M2170L/M3171L/M317CU/W2171U) M2170L/M2171L) *4-203-124-11 INDIVIDUAL CARTON (KV-M2171A/M2170B/M2171B/M2170D/M2171D/ M2170E/M2171E) 1-693-303-11 TUNER (TELE1X001A) *4-203-123-01 INDIVIDUAL CARTON (KV-M2170U/M2171U) (KV-M2170A/M2171A/M2171KR) 8-598-331-00 TUNER (BT-AC401) *4-203-111-01 CUSHION (UPPER) (ASSY) (KV-M2170B/M2171B/M2170D/M2171D/M2170E/ (KV-M2170A/M2170K/M2171K/M2171KR/ M2170L/M2171L/M2170U/M2171U) *4-203-111-11 CUSHION (UPPER) (ASSY) (KV-M2171A/M2170B/M2171B/M217(D/M2171D/ 1-693-310-11 TUNER (TELE4X002A) (KV-M2170K/M2171K) 1-693-302-11 TUNER (UV1315)(KV-M2170L/M2171L) 8-598-333-00 TUNER (BT-AU601) (KV-M2170U/M2171U) 4 B 451-295-45 DEFLECTION YORK (Y21PF2B41) M2170E/M2171E) *4-203-112-01 CUSHION (BOTTOM) (ASSY) (KV-M2170A/M2170K/M2171K/M2171KR/ V901 (8-738-784-05 Picture tube (SD-159) (A513xH61x) M2170L/M2171L/M2170U/M2171U) *4-203-112-11 CUSHION (BOTTOM) (ASSY) ********* (KV-M2171A/M2170B/M2171B/M217(D/M2171D/ M2170E/M2171E) *4-042-477-01 BAG, PROTECTION (KV-M2170A/M2171A/M2170B/M2171B/M2170D/ M2171D/M2170E/M2171E) *4-039-905-02 BAG, PROTECTION (KV-M2170K/M2171K/M2171KR/M217)L./ M2171L/M2170U/M2171U) REMOTE COMMANDER

1-473-194-11 COMMANDER, STANDARD TYPE (RM-86)